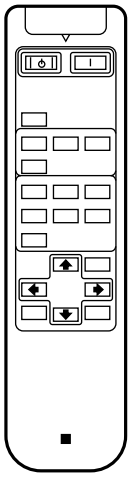
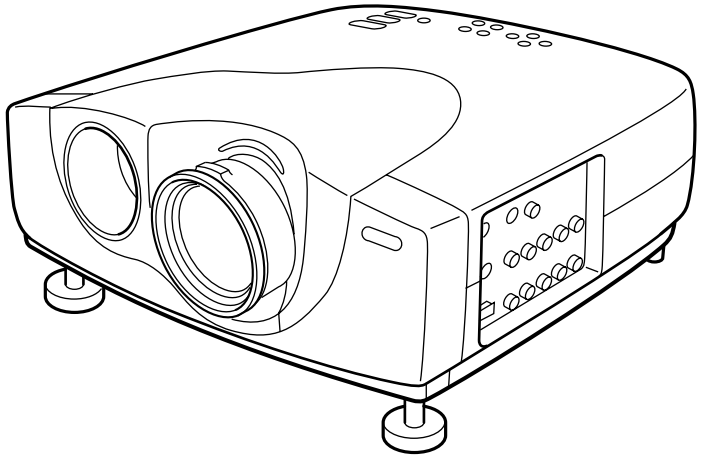
SERVICE MANUAL

MODEL	DEST.	CHASSIS NO.
VPL-VW12HT	WORLD	

MODEL	DEST.	CHASSIS NO.
RM-PJVW10	WORLD	





VIDEO PROJECTOR

SONY

⚠警告

このマニュアルは，サービス専用です。
お客様が，このマニュアルに記載された設置や保守，点検，修理などを行うと感電や火災，人身事故につながることがあります。
危険をさけるため，サービストレーニングを受けた技術者のみご使用ください。

⚠WARNING

This manual is intended for qualified service personnel only.
To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

⚠WARNUNG

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.
Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegeben Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

⚠AVERTISSEMENT

Ce manual est destiné uniquement aux personnes compétentes en charge de l’entretien. Afin de réduire les risques de décharge électrique, d’incendie ou de blessure n’effectuer que les réparations indiquées dans le mode d’emploi à moins d’être qualifié pour en effectuer d’autres. Pour toute réparation faire appel à une personne compétente uniquement.

WARNING!!

AN INSULATED TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY A ⚠ MARK ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION!!

AFIN D’ÉVITER TOUT RISQUE D’ÉLECTROCUTION PROVENANT D’UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D’ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE.
LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ Á L’ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS Á LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MAPQUE ⚠ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES SONT D’UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

For the customers in the Netherlands
Voor de klanten in Nederland

Hoe u de batterijen moet verwijderen, leest u in de tekst van deze handleiding.

Gooi de batterij niet weg maar lever deze in als klein chemisch afval (KCA).

Für Kunden in Deutschland

Entsorgungshinweis: Bitte werfen Sie nur entladene Batterien in die Sammelboxen beim Handel oder den Kommunen. Entladen sind Batterien in der Regel dann, wenn das Gerät abschaltet und signalisiert “Batterie leer” oder nach längerer Gebrauchsdauer der Batterien “nicht mehr einwandfrei funktioniert”. Um sicherzugehen, kleben Sie die Batteriepole z.B. mit einem Klebestreifen ab oder geben Sie die Batterien einzeln in einen Plastikbeutel.

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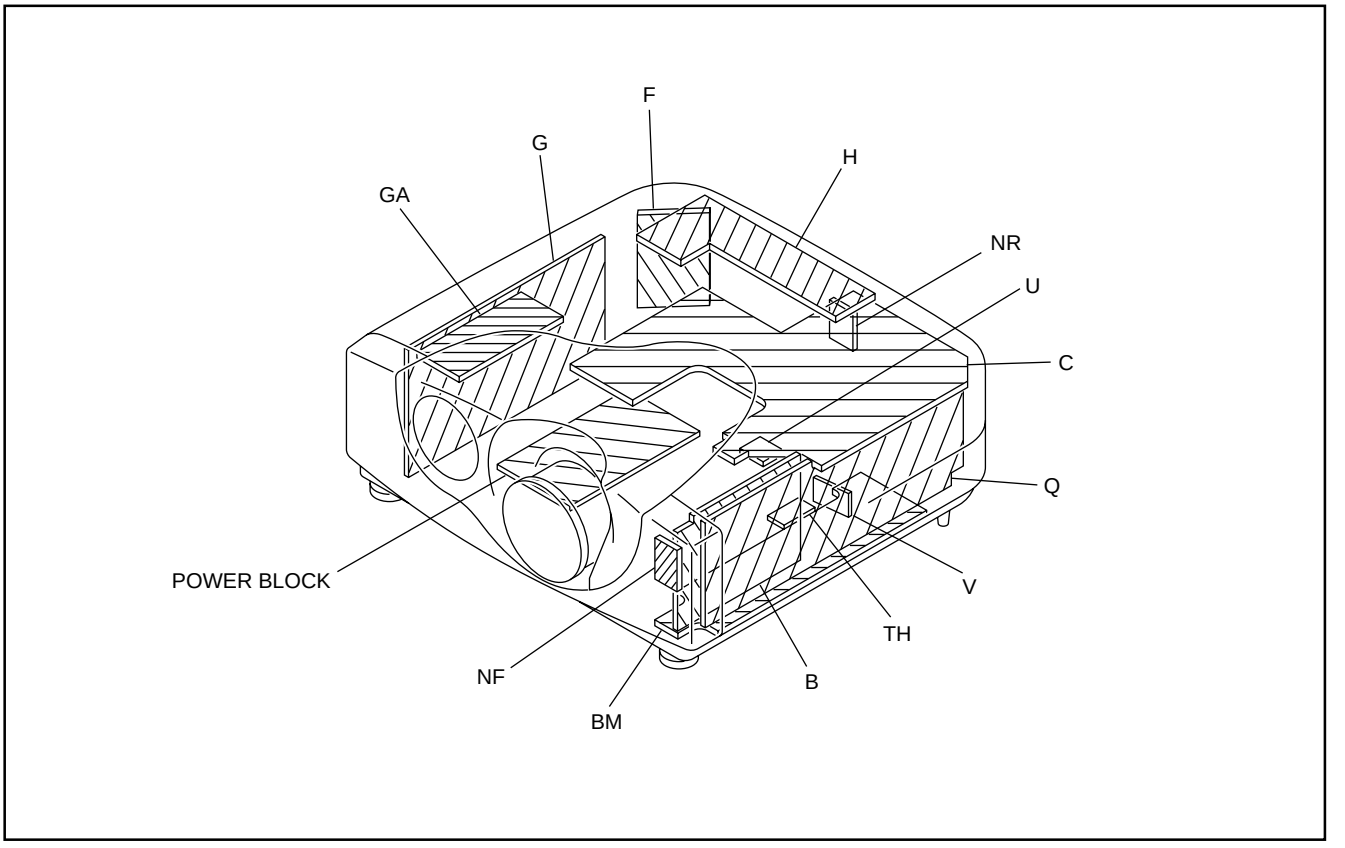
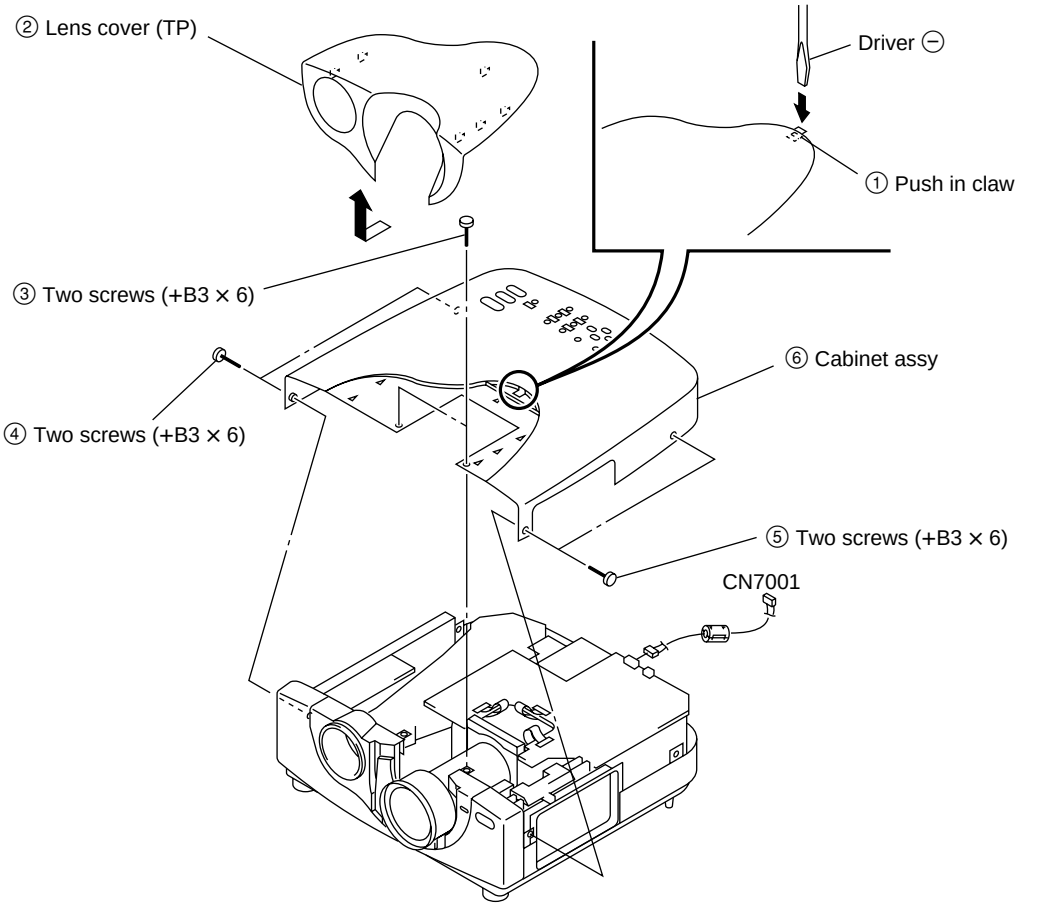
Section 1
Service Informations

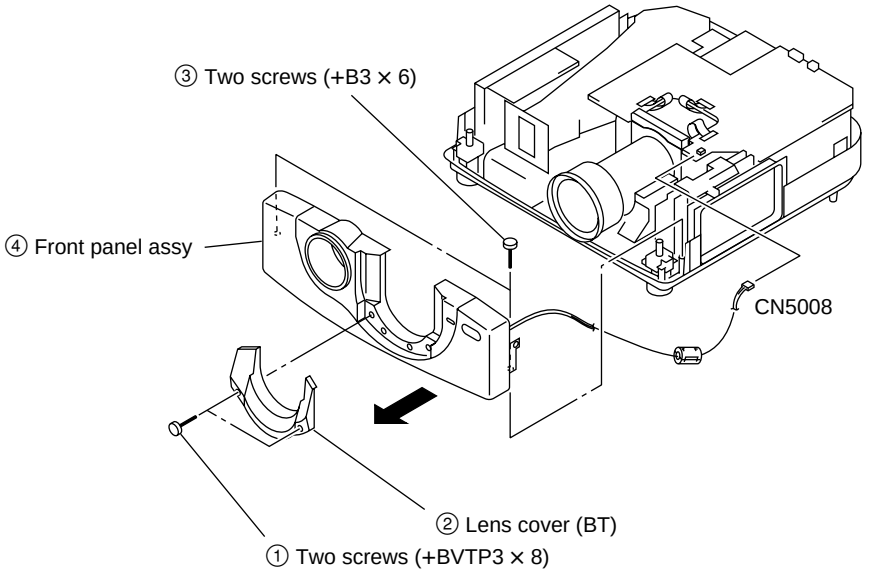
1-1. Circuit Boards Location



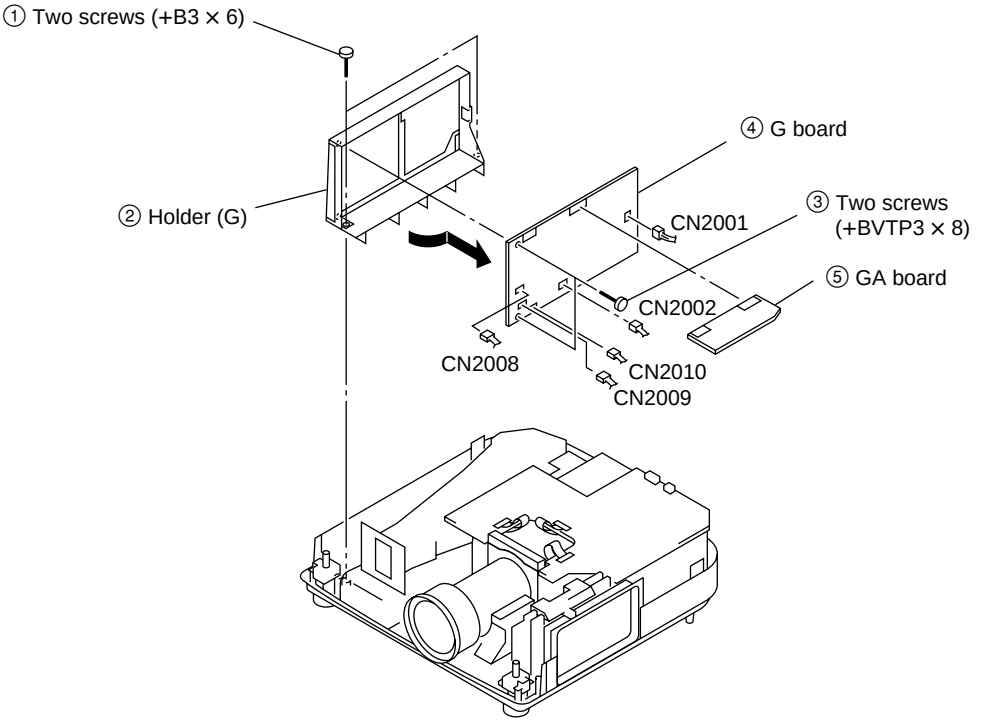
1-2. Cabinet Assy Removal



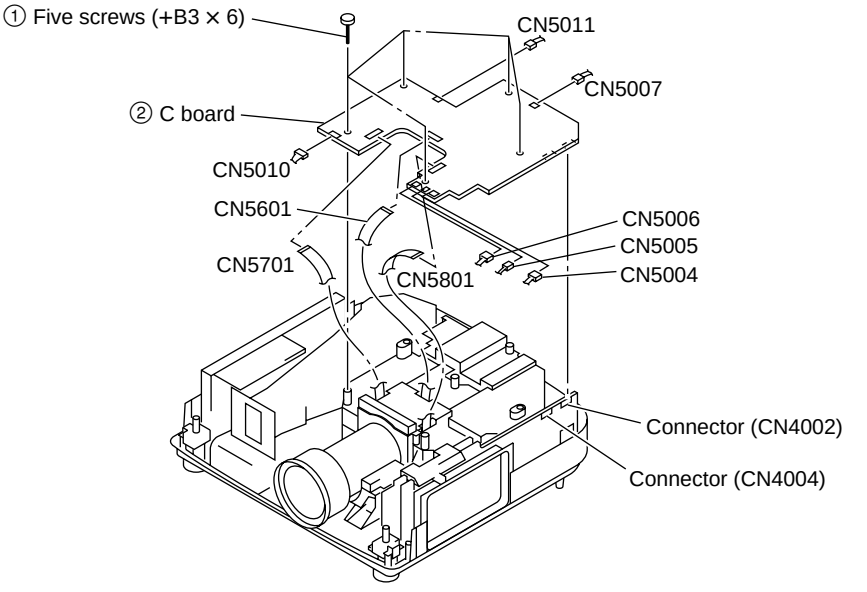
1-3. Front Panel Assy Removal



1-4. G and GA Boards Removal

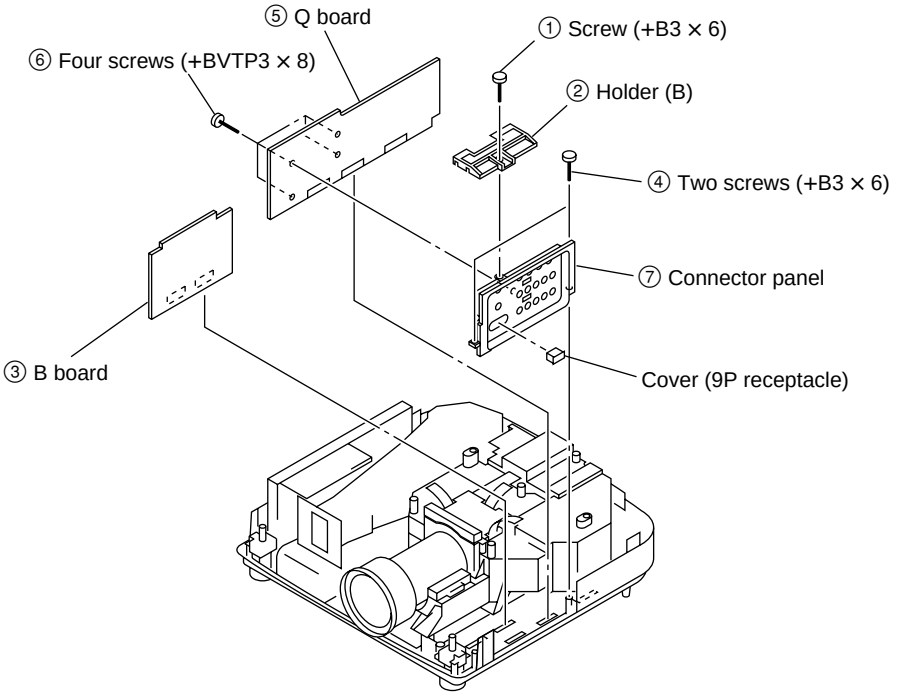


1-5. C Board Removal



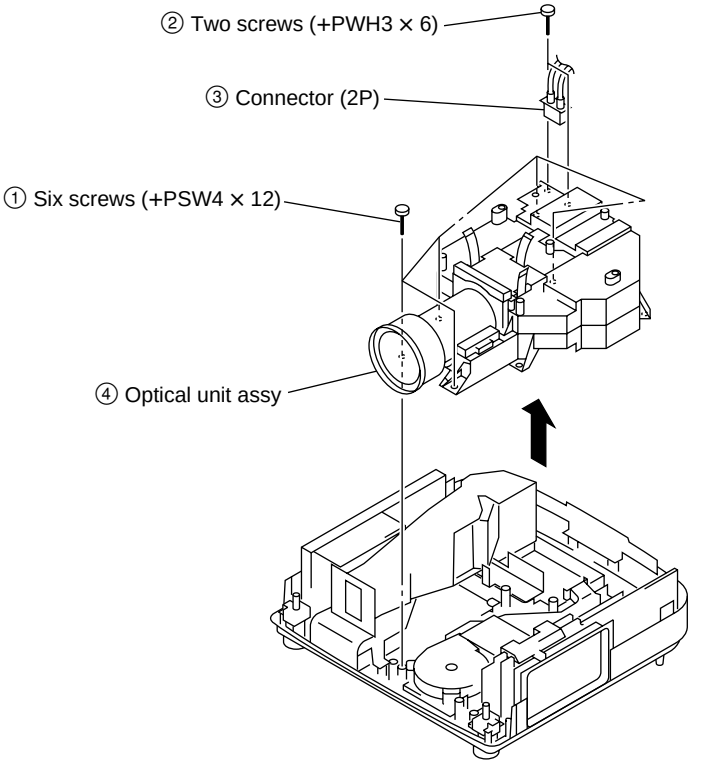
1-6. B and Q Boards Removal

• Remove the C Board (Refer to 1-5.).



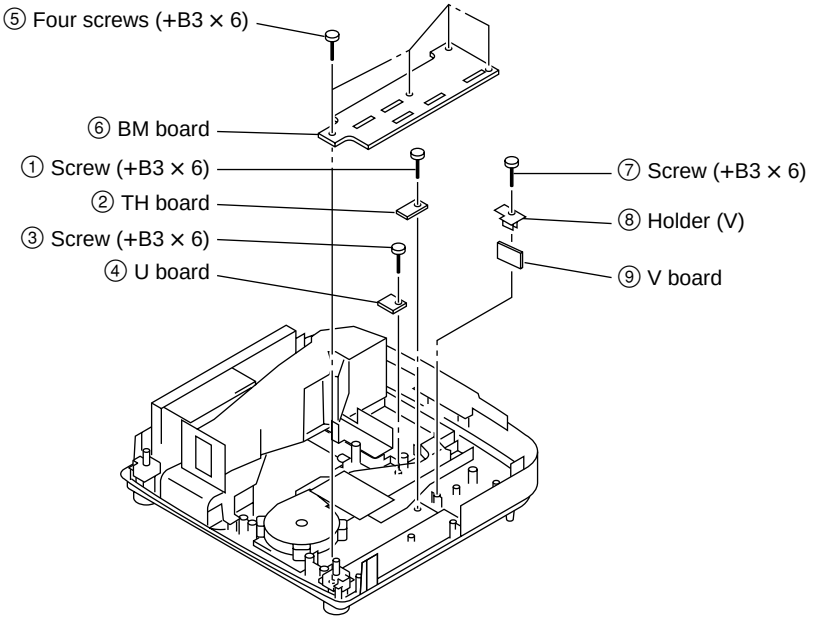
1-7. Optical Unit Assy Removal

• Remove the C Board (Refer to 1-5.).



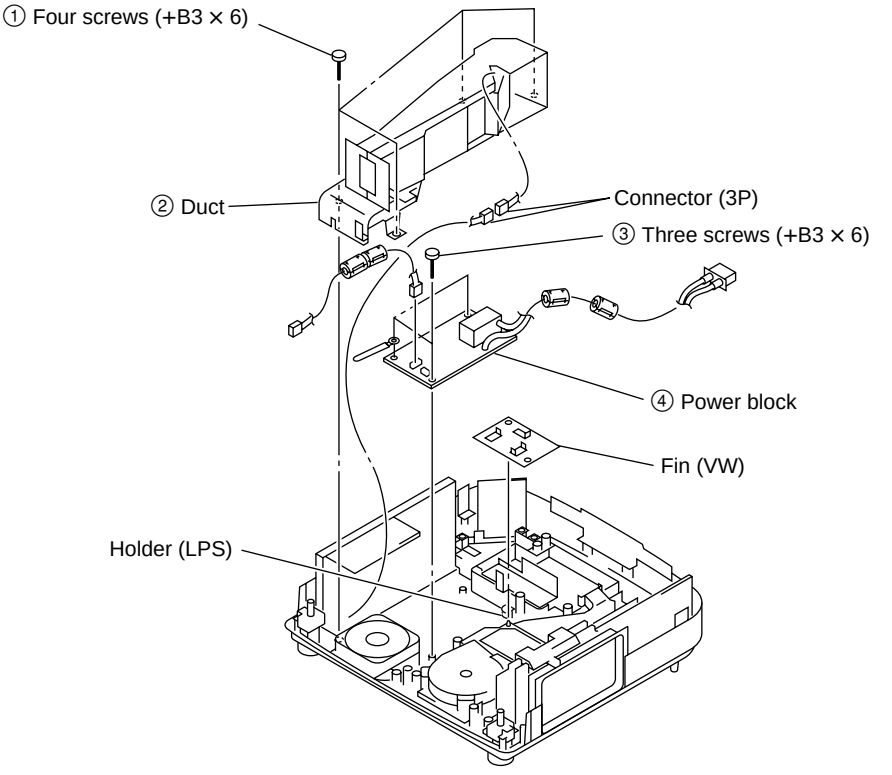
1-8. TH, U, BM and V Boards Removal

• Remove the B and Q Boards (Refer to 1-6.).
• Remove the optical unit assy (Refer to 1-7.).



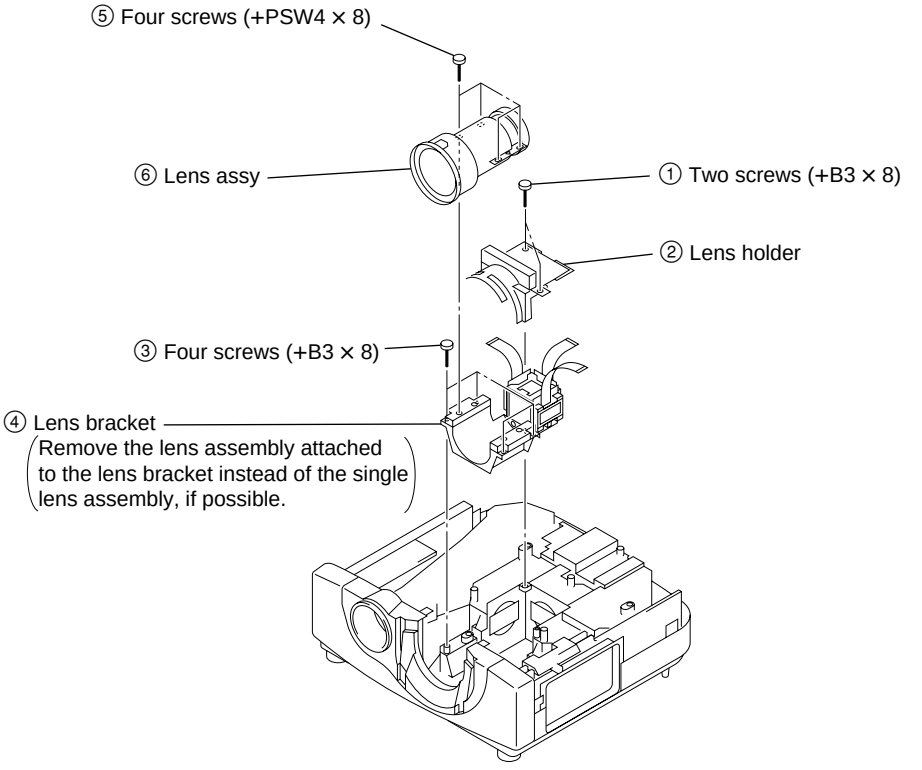
1-9. Power Block Removal

• Remove the optical unit assy (Refer to 1-7.).



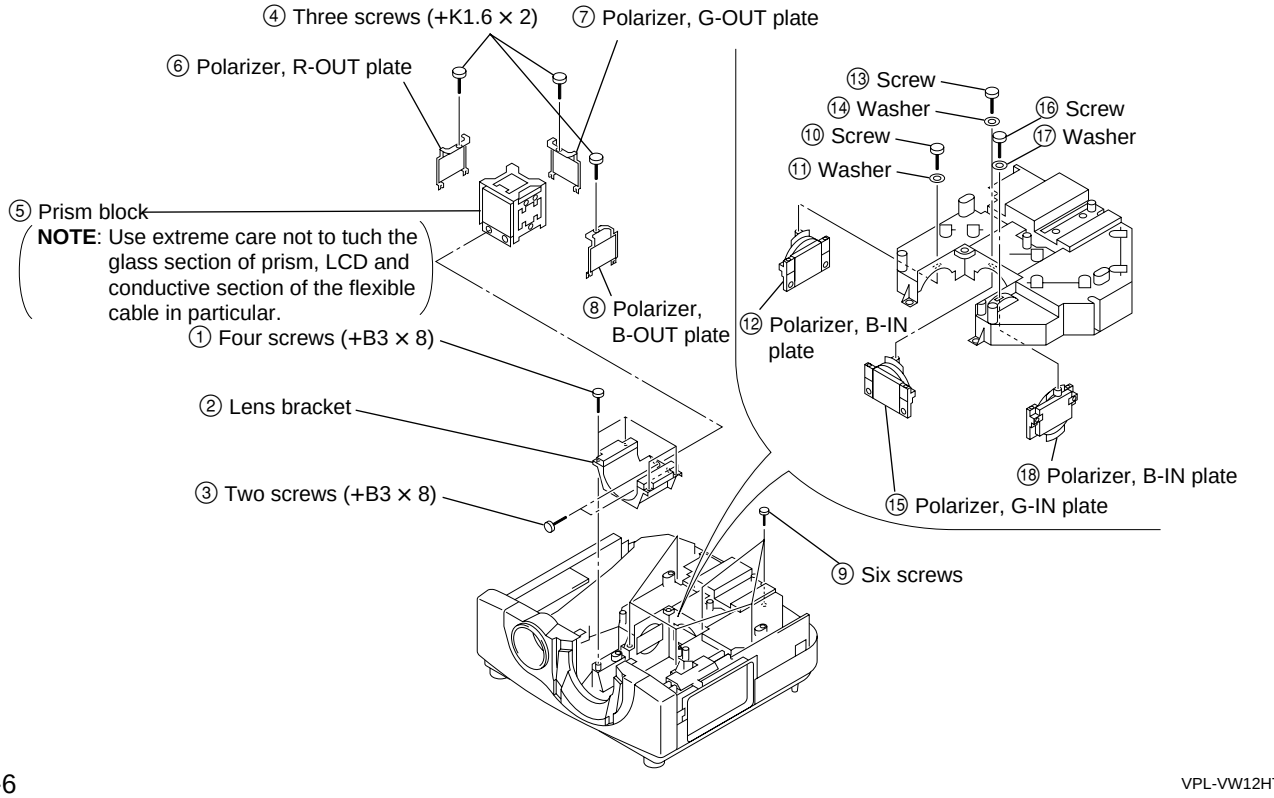
1-10. Lens Assy Removal

• Remove the C Board (Refer to 1-5.).


⑤ Four screws (+PSW4 × 8)
⑥ Lens assy
① Two screws (+B3 × 8)
② Lens holder
③ Four screws (+B3 × 8)
④ Lens bracket
Remove the lens assembly attached to the lens bracket instead of the single lens assembly, if possible.

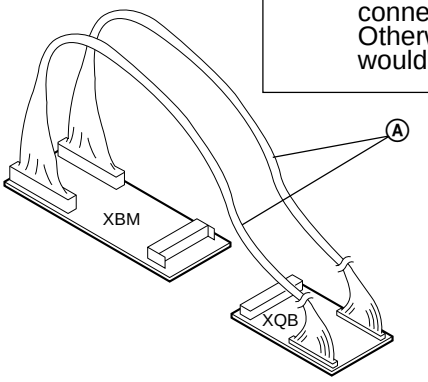
1-11. Prism Block Removal

• Remove the B and Q Boards (Refer to 1-6.).
• Remove the optical unit assy (Refer to 1-7.).

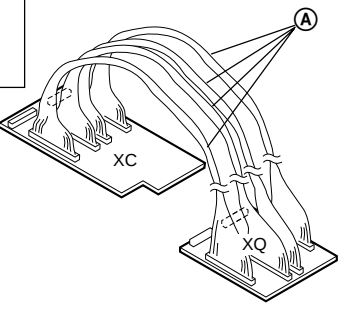

④ Three screws (+K1.6 × 2)
⑦ Polarizer, G-OUT plate
⑥ Polarizer, R-OUT plate
⑬ Screw
⑭ Washer
⑯ Screw
⑩ Screw
⑰ Washer
⑪ Washer
⑤ Prism block
NOTE: Use extreme care not to tuch the glass section of prism, LCD and conductive section of the flexible cable in particular.
⑧ Polarizer, B-OUT plate
⑫ Polarizer, B-IN plate
① Four screws (+B3 × 8)
② Lens bracket
③ Two screws (+B3 × 8)
⑱ Polarizer, B-IN plate
⑮ Polarizer, G-IN plate
⑨ Six screws

1-12. Extension Boards

NOTE: Please fit it correctly into the connector.
Otherwise, Power Board would be destroyed.



XQB Board : A-1391-180-A
XBM Board : A-1391-181-A
External Cable Ⓐ : 1-900-262-34

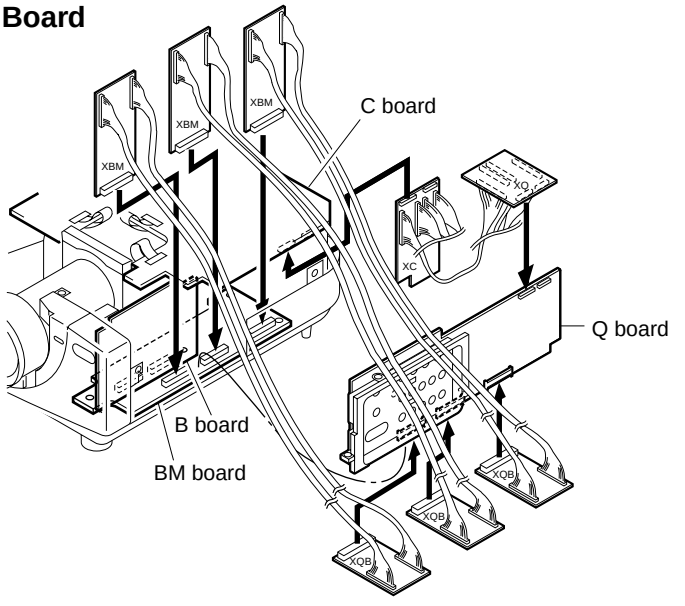


XC Board : A-1391-182-A
XQ Board : A-1391-183-A
External Cable Ⓐ : 1-900-262-34

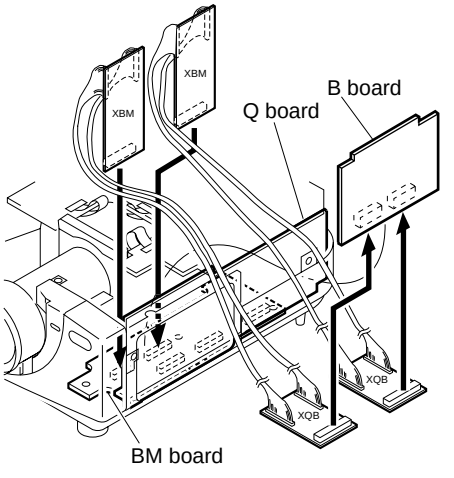
Q ⇔ BM----used to three extension board
B ⇔ BM ----used to two extension board

Q ⇔ C----used to one extension board

(1)Extension of Q Board



(2)Extension of B Board



1-13. Power Cord

Use a proper power cord for your local power supply.

	The United States, Canada		Continental Europe		UK, Ireland, Australia, New Zealand	Japan
Plug type	VM0233	290B	YP-12A	COX-07	—[1)]	YP332
Female end	VM0089	386A	YC-13B	COX-02	VM0310B	YC-13
Cord type	SJT	SJT	H05VV-F	H05VV-F	N13237/CO-228	VCTF
Rated Voltage & Current	10A/125V	10A/125V	10A/250V	10A/250V	10A/250V	7A/125V
Safety approval	UL/CSA	UL/CSA	VDE	VDE	VDE	DENAN

1) Use the correct Plug for your country.

1-14. Software Writing Procedure

∗ : Windows is a registered trademark of Microsoft Corporation.

When the following IC is replaced, the writing job should be performed as described below.
Target ICs : Main CPU (IC5005)
Scanning ROM (IC5208)

(1) Writing the Main CPU

This section describes how to use this Windows application for upgrading software of main CPU (H8S/2633). Jig and application software are available from Hitachi dealer all over the world.
Adaptor board : HS0008EASF4H
Windows interface software : HS6400FWIW4SF

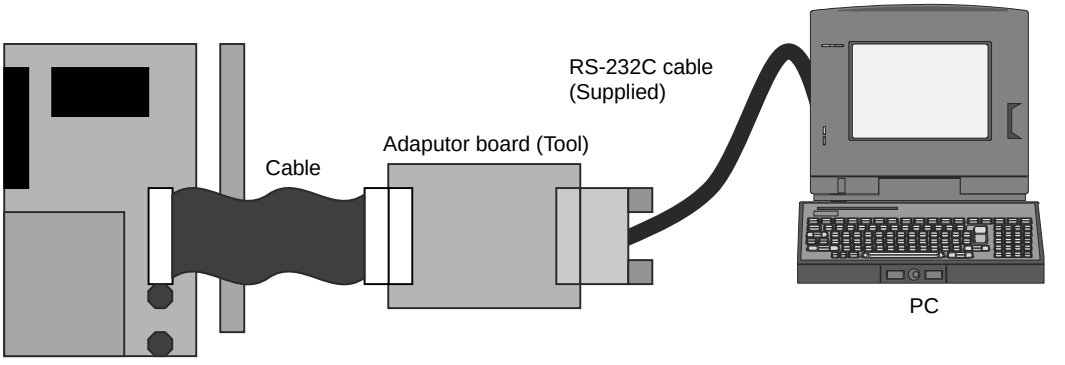
1. Setup before starting the writing

Following setup is required before starting the writing.

1) Open the cabinet of the adaptor board of the jig.
2) Connect pin-2 and pin-3 with a jumper JP1.
3) Set switches as shown below.
   S3-1 : 1 S4-1 : E
   S3-2 : 1 S4-2 : E
   S3-3 : 0 S4-3 : E
   S3-4 : 1 S4-4 : D
   S3-5 : 1 S4-5 : D
   S3-6 : 1 S4-6 : D
   S3-7 : 1 S4-7 : E
   S3-8 : 1 S4-8 : E
4) Set Power switch as OFF (0).

2. Connection

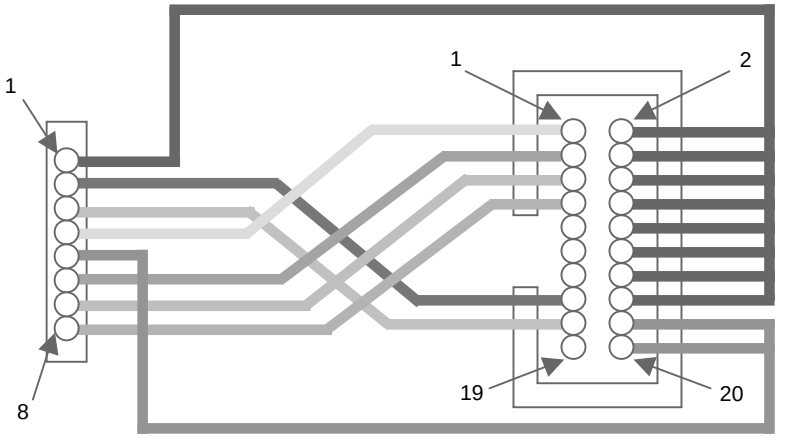
Disconnect the AC power cord of the projector. With the power cord removed, connect equipments as shown below. Connect all of the equipment and connect the AC power cord.



VPL-VW12 : C board CN5002

Note

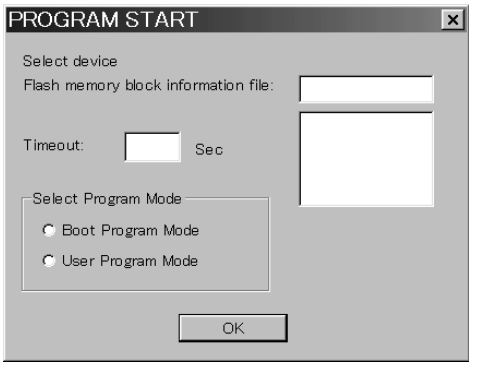
Cable must be modified as shown below. 20 pins cable is supplied with jig, modify the other side as 8 pins.



PJ	Ref	Flash jig
1	GND	2, 4, 6, 8, 10, 12, 14, 16
2	TXD	15
3	RXD	17
4	$\overline{\text{RES}}$	1
5	VIN	18, 20
6	FWR	3
7	MD1	5
8	MD2	7

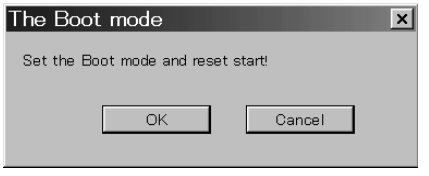
3. How to use application

3-1. Double-click the application icon to start it up.
Projector must be set in the stand-by mode.
Set following items as shown below, and click OK.



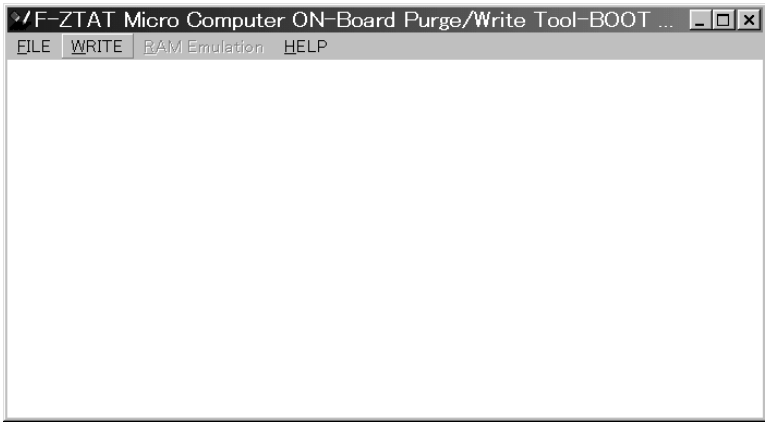
Flash memory block information file : 2633f.inf
Timeout : 5 sec
Program Mode : Boot Program Mode

3-2. Following message will be displayed. Press the START/STOP button of the adaptor board, and click OK.

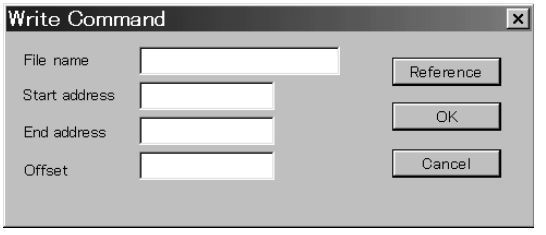


3-3. The application sends the write control program to the device. Wait for a while.

3-4. Upon completion of sending the write control program, select WRITE from the menu.



Following message is displayed.
Enter the filename that you want to update, and set other items as shown below. Click OK.



Start address: 00000000
End address: 0003FFFF
Offset: 0

3-5. Flashing of all data is in progress. Wait for a while.

(2)Writing the Scanning ROM

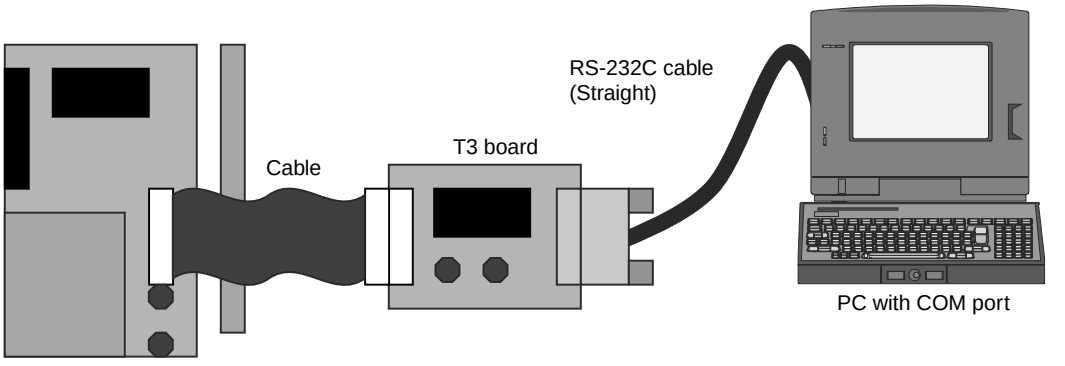
This section describes the procedure of upgrading the Flash ROM (IC5208) in which software of the Pixelworks scan converter (PW264) is written.

1. Setup before starting the writing

The software is supplied as the Zip file.
Unzip the software before starting to execute the application.

2. Connection

Disconnect the AC power cord. With the AC power cord disconnected, connect the SC board that is prepared as service part, projector and PC with cable (prepared as service part) and RS-232C straight cable as shown below. Upon completion of the connections, connect the AC power cord.



VPL-VW12 : C board CN5203

Service parts information
T3 board : A-1394-975-A
Cable : Registration is under way.

3. How to use the application software

3-1. Double-click the application icon to start it up. Projector must be in the stand-by mode. Click Next.

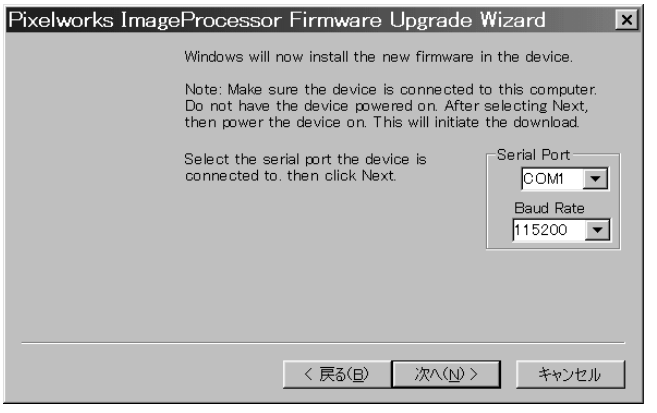
Pixelworks ImageProcessor Firmware Upgrade Wizard
pixelworks
see the future
This wizard will upgrade the firmware in devices that contain the Pixelworks ImageProcessor. Please contact technical support if you experience problems while using this wizard.
Before upgrading the device, you will we prompted to select the firmware file you would like to install.
To select the firmware file, click Next.
About
_1998-99 Pixelworks, Inc.
< 戻る(B)
次へ(N) >
キャンセル

3-2. Enter the inf file that you want to upload to the projector. The rule of naming the version file (*.inf) is shown below.

pw1v100f . inf
- version name
- model name 1: For VPL-PX30/20
  2: For VPL-VW10/12

Pixelworks ImageProcessor Firmware Upgrade Wizard
Select the new firmware file that you would like to install in your hardware.
Enter path and name of firmware file.
bin¥Release¥OfficialRelease¥pw1v100f.inf
Browse
Note: Check with Pixelworks to verify that you have the latest version of the firmware available.
To continue, click Next.
< 戻る(B)
次へ(N) >
キャンセル

3-3. Set the serial communication as follows.
Set baud rate to 115200 (fixed) and click Next.


Pixelworks ImageProcessor Firmware Upgrade Wizard
Windows will now install the new firmware in the device.
Note: Make sure the device is connected to this computer. Do not have the device powered on. After selecting Next, then power the device on. This will initiate the download.
Select the serial port the device is connected to, then click Next.
Serial Port
COM1
Baud Rate
115200
< 戻る(B)
次へ(N) >
キャンセル

3-4. Progress status bar is displayed as shown below, and application waits to turn on the power. Press the ON key of the projector to start uploading the software. It takes a few minutes for upgrading.
The four hex files are necessary for upgrading the software as shown below. These files should be placed in the same directory as the ∗.inf file that you have selected. If not, error message will be shown. Please note that the version numbers of these hex files do not necessarily match with the version numbers of ∗.inf file.
pw∗f****.hex
pw∗c****.hex
pw∗g****.hex
pw∗r****.hex

Pixelworks ImageProcessor Firmware Upgrade Wizard
Windows will now install the new firmware in the device.
Note: Make sure the device is connected to this computer. Do not have the device powered on. After selecting Next, then power the device on. This will initiate the download.
Select the serial port the device is connected to. then click Next.
Serial Port
COM1
Baud Rate
115200
Now, power on the device. While downloading, you will see a progress indicator. It may take several seconds to complete.
Download progress for file pw0f100a.HEX
< 戻る(B)
次へ(N) >
キャンセル

3-5. When upgrading of all of software is completed with success, disconnect cable from the board on the projector. Keep pressing the Power key to off the projector.

Pixelworks ImageProcessor Firmware Upgrade Wizard
Windows has successfully installed the new firmware in the device.
To complete the operation click Finish.
< 戻る(B)
完了(F)
キャンセル

Section 2
Electrical Adjustments

2-1. Preparations

2-1-1. Equipment Required

- Oscilloscope
  Tektronix 2465 or equivalent
  (Bandwidth: 350 MHz or more)
- NTSC, PAL, SECAM component signal generator
  Tektronix TG2000 + AVG1 (Optional module) + AWVG1 (Optional module) or equivalent
- VG (Programmable video signal generator)
  VG814 or equivalent
- Digital voltmeter
  Advantest TR6845 or equivalent
- Luminance meter

Note: Perform the following adjustment at least five minutes after turning on the power.

2-1-2. Reset the Air Filter

1. Insert the Power Cord and let it standby.
2. Press the keys in the following ORDER:
   "RESET" → "MENU" → "DOWN" → "ENTER"
3. Turn the Power ON.
4. Please confirm that the message of "Please exchange the air filter" does not appear in the picture.

2-1-3. Setting the Factory Mode

1. Make sure that the STATUS in the menu is ON.
2. Exit the menu.
3 Press the keys in the following ORDER:
   "ENTER" → "ENTER" → "LEFT" → "ENTER"
4. The message "Do you wish to enter into the FACTORY MODE?" will be displayed.
5. Select YES.

2-2. RGB VCOM Adjustment

1. Enter the P.DRV of the Device adjust with Factory mode.
2. Enter the item of 01 VCOM G, and check the 1 line ON/OFF signal.
3. Adjust the ← and → keys to minimize the flicker. Similarly, and perform Red and Blue adjustment similarly.
   (02 VCOM R, 03 VCOM B)
4. Select the SAVE TO MEMORY on the Device adjust page of the menu. Press the ENTER to save the data.

2-3. Signal Level Adjustment

Perform the following settings:

W/B:	LOW mode
INPUT-A:	10 steps
VIDEO:	100% COLOR BARS
CONTRAST:	80
BRIGHT:	50 (Initial value)

2-3-1. SUB-BRIGHT (NTSC) Adjustment

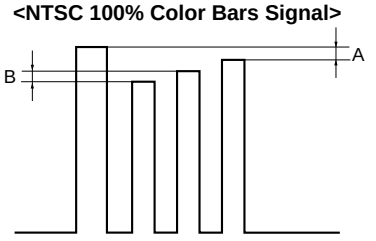
1. Input the NTSC 100% color bars signal to the VIDEO input.
2. Connect oscilloscorp to TP5023 on the C board.
3. Set the COLOR to 0.
3. Enter the RGB-MTRX on the Device adjust of the menu.
4. Select the item of 03 SU BRT. Adjust the ← or → key so that the two bars at the center become flat.

2-3-2. SUB-CONT, HUE and COLOR Adjustment

2-3-2-1. SUB-CONT. HUE and COLOR (VIDEO) Adjustment

1. Input the NTSC 100% color bars signal to the VIDEO input.
2. Connect oscilloscope to TP5024 on the C board.
3. Set the COLOR to 0.
4. Enter the RGB-MTRX on the Device adjust of the menu.
5. Select the item of 08 YUV CONT, and adjust the amplitude of the following waveform for 0.63 Vp-p.
6. Set the COLOR to 50.
7. Select the item of 09 YUV COL. Adjust the ← or → key so that the right and left bars are equal in level (A portion).
8. Select the item of 02 SUB HUE. Adjust the ← or → key so that the two bars in the middle are equal in level (B portion).

<NTSC 100% Color Bars Signal>



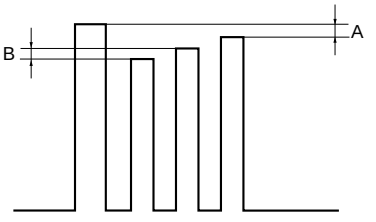
*** Be sure to set the GND level to bottom with DC 0.5V range.**

9. Press the MEMORY key to save the data.
10. Similarly, perform steps 1 to 8 with PAL (100% Color Bars signal) system.
11. Press the MEMORY key to save the data.

2-3-2-2. SUB-CONT, HUE and COLOR (Component) Adjustment

1. Input the 15k Component 100% Color Bars signal to INPUT-A (pin 5), and select the COMPONENT by the INPUT-A of the SET SETTING.
2. Connect an oscilloscope to TP5024 on the C board.
3. Set the COLOR to 0.
4. Enter the RGB-MTRX on the Device adjust of the menu.
5. Select the item of 08 YUV CONT. Adjust the amplitude for 0.63 Vp-p.
6. Set the COLOR to 50.
7. Select the item of 09 YUV COL. Adjust the ← or → key so that the right and left bars are equal in level (A portion).
8. Select the item of 02 SUB HUE. Adjust the ← or→ key so that the two bars in the middle are equal in level (B portion).
9. Press the MEMORY key to save the data.

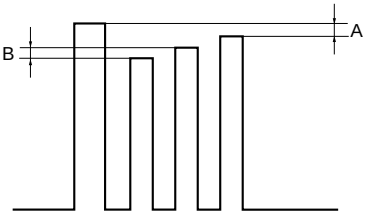
<15k Component 100% Color Bars Signal>



2-3-2-3. SUB-CONT, HUE and COLOR (DTV) Adjustment

1. Input the 1080/60i 100% Color Bars signal to INPUT-A (pin 5), and select the DTV-YPbPr by the INPUT-A of the SET SETTING.
2. Connect an oscilloscope to TP5024 on the C board.
3. Set the COLOR to 0.
4. Enter the RGB-MTRX on the Device adjust of the menu.
5. Select the item of 08 YUV CONT. Adjust the amplitude for 0.63 Vp-p.
6. Set the COLOR to 50.
7. Select the item of 09 YUV COL. Adjust the ← or → key so that the right and left bars are equal in level (A portion).
8. Select the item of 02 SUB HUE. Adjust the ← or → key so that the two bars in the middle are equal in level (B portion).
9. Press the MEMORY key to save the data.
10. Switch the format of 1080/60i to GRB output.
    Select the DTV-GBR by the INPUT-A of the SET SETTING.
    Similarly, perform steps 2 to 9.

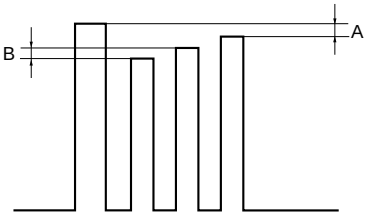
<1080/60i 100% Color Bars Signal>



2-3-2-4. SUB-CONT, HUE and COLOR (15k RGB) Adjustment

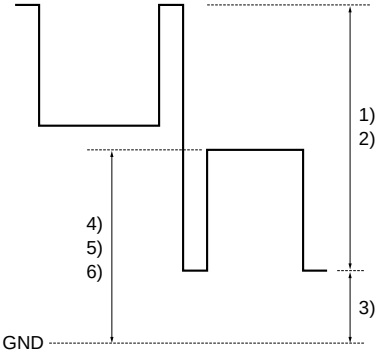
1. Input the 15k RGB 100% Color Bars signal to INPUT-A (pin 5), and select the DTV-GBR by the INPUT-A of the SET SETTING.
2. Connect an oscilloscope to TP5024 on the C board.
3. Set the COLOR to 0.
4. Enter the RGB-MTRX on the Device adjust of the menu.
5. Select the item of 08 YUV CONT. Adjust the amplitude for 0.63 Vp-p.
6. Set the COLOR to 50.
7. Select the item of 09 YUV COL. Adjust the ← or → key so that the right and left bars are equal in level (A portion).
8. Select the item of 02 SUB HUE. Adjust the ← or → key so that the two bars in the middle are equal in level (B portion).
9. Press the MEMORY key to save the data.

<15k RGB 100% Color Bars Signal>



2-3-3. Signal Center and the Amplitude Adjustment

1. Set the Device Adjust / Other 07 3D GAMMA SW of the menu into 0.
2. Enter Device Adjust / GAMMA and display Level 7.
3. Install S5202 and 5301 to the sides of SG and W respectively.
4. Make the following adjustments by using Device Adjust / P.DRV.
   1) 18 VAMP/BRT TP5604 8.0 ± 0.02 Vp-p
   2) 23 VAMP2/BRT TP5704 8.0 ± 0.02 Vp-p
   3) 04 SIG CEN TP5704 Set the DC level under the signal to 3.5 ±0.02 V_{DC}
   4) 20 VAMP2/SUB CON R0 TP5704 6.80 ± 0.01 V_{DC}
   5) 16 VAMP/SUB CON G0 TP5604 6.70 ± 0.01 V_{DC}
   6) 22 VAMP2/SUB CON B0 TP5804 6.60 ± 0.01 V_{DC}



5. After the adjustment, turn S5202 and 5301 back to N side.
6. Let the picture turn upside down in the INSTALL SETTING menu, and copy the adjustment value of 4 1) and 2).
7. After Device Adjust / Other 07 30GAMMA SW is resumed to 1, store the adjustment data into the memory.

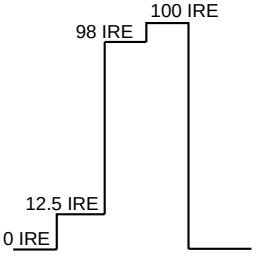
2-3-4. ODD/EVEN Level Adjustment

1. Input the 50 IRE Flat XGA signal to INPUT-A.
2. Set the unit in Green-only. Adjust so that the vertical line on every other dot become thinner by the P.DRV/ SUB CON G E on the Device adjust.
3. Set the unit in Red-only. Adjust so that the vertical line on every other dot become thinner by the P.DRV/SUB CON R E on the Device adjust.
4. Set the unit in Blue-only. Adjust so that the vertical line on every other dot become thinner by the P.DRV/ SUB CON B E on the Device adjust.
5. Let the picture turn upside down in the INSTALL SETTING menu. First copy the value of SUB CON G E, R E, B adjusted within 2 to 4, and then repeat the adjustment within 2 to4. Next time, adjust to P.DRV/ SUB CON GO, RO, BO.
6. Press the MEMORY key to save the data.

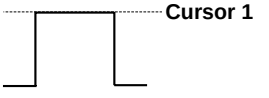
2-3-5. RGB High Gain/Bias Adjustment

2-3-5-1. RGB High Gain/Bias Adjustment

1. Input the W/B HIGH adjusting signal to INPUT-A, and select the COMPUTER by the INPUT-A of the SET SETTING.

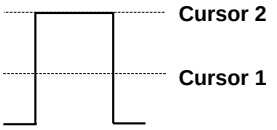


2. Set the CONTRAST to 80, BRIGHT to 50, and COL TEMP to HIGH respectively.
3. Enter the OTHER on the Device adjust of the menu.
4. Set the 06 3D GAMMA/THROUGH from 0 to 1.
5. Set the 07 3D GAMMA/SW from 1 to 0.
6. Connect an oscilloscope to TP5604 on the C board.
7. Enter the 3D GAMMA on the Device adjust of the menu, display the Level 0, and put the cursor 1 on the position shown in the figure below.



8. Display the Level 7.

9. The same way as in step 7, put the cursor 2 on the position shown in the figure below.



10. Press the GAIN key to enter the GAIN ADJUST MODE from the 3D GAMMA. Adjust the G GAIN so that the 100 IRE level of the W/B HIGH adjusting signal is equal to cursor 2.
11. Press the BIAS key to enter the BIAS ADJUST. Adjust the G BIAS so that the 12.5 IRE level of the W/B HIGH adjusting signal is equal to cursor 1.
12. Repeat steps 10 and 11 several times.
13. Connect an oscilloscope to TP5704 on the C board. Perform the same adjustments as in steps 7 to 12 using R G GAIN/BIAS.
    Note: When you adjust GAIN, please be careful not to destroy 98IRE.
14. Connect an oscilloscope to TP5804 on the C board. Perform the same adjustments as in steps 7 to 12 using B GAIN/BIAS.
15. Press the MEMORY key to save the data.
16. Enter the OTHER on the Device adjust of the menu.
17. Set the 06 3D GAMMA/THROUGH from 1 to 0.
18. Set the 07 3D GAMMA/SW from 0 to 1.
19. Press the MEMORY key to save the data.

2-3-5-2.RGB W/B Low and Custom Adjustment

1. Enter the W/B ADJUST LOW from the PIC. CTRL menu.
2. Copy the adjusted value of the HIGH mode in the R/G/B BIAS.
3. Write the following values in the R/G/B GAIN.
   R GAIN: adjusted value of HIGH mode
   G GAIN: adjusted value of HIGH mode −30
   B GAIN: adjusted value of HIGH mode −30
4. Press the MEMORY key to save the data.
5. Write the following values in the WB ADJUST CUSTOM 1 to 4.
   CUSTOM 1: B/G GAIN −10
   CUSTOM 2: B/G GAIN −20
   CUSTOM 3: B/G GAIN −40
   CUSTOM 4: B/G GAIN −50
6. Press the MEMORY key to save the data.

2-4. VIDEO W/B Adjustment

2-4-1. Component W/B High Adjustment

Note: Set the COL to 50.

1. Input the Component Flat Field signal to INPUT-A, and select the COMPONENT by the INPUT-A of the SET SETTING.
2. Set the 06 3D GAMMA/THROUGH to 0.
3. Set the 07 3D GAMMA/SW to 1 (3D Gamma: ON).
4. Enter the W/B ADJUST HIGH from the menu.
5. Input the 80 IRE Component Flat Field signal to INPUT-A.
6. Adjust the chromaticity (x, y) to the values shown below by the G GAIN and B GAIN of the W/B HIGH.
7. Input the 20 IRE Component Flat Field signal to INPUT-A.
8. Adjust the chromaticity (x, y) to the values shown below by the R GAIN and B GAIN of the W/B HIGH.
9. Repeat steps 5 to 8 until the chromaticity meets the below specifications.
10. Press the MEMORY key to save the data.

    Specification:
    Chromaticity (x) = 0.284 ± 0.005
    Chromaticity (y) = 0.297 ± 0.005

2-4-2. Component W/B Low Adjustment

1. Enter the W/B ADJUST LOW from the menu.
2. Input the 80 IRE Component Flat Field signal to INPUT-A.
3. Adjust the chromaticity (x, y) to the values shown below by the G GAIN and B GAIN of the W/B LOW.
4. Input the 20 IRE Component Flat Field signal to INPUT-A.
5. Adjust the chromaticity (x, y) to the values shown below by the R GAIN and B GAIN of the W/B LOW.
6. Repeat steps 2 to 5 until the chromaticity meets the below specifications.
7. Press the MEMORY key to save the data.

    Specification:
    Chromaticity (x) = 0.313 ± 0.005
    Chromaticity (y) = 0.329 ± 0.005

2-4-3. W/B Low Custom Adjustment

1. Copy the data in the CUSTOM 1 to 4 using the menu.
   CUSTOM 1: GAIN = RGB/HIGH
   BIAS = VIDEO/HIGH
   CUSTOM 2: GAIN = RGB/HIGH + 40
   BIAS = VIDEO/HIGH
   CUSTOM 3: GAIN = VIDEO/LOW + 40
   BIAS = VIDEO/LOW
   (R GAIN is + 0)
   CUSTOM 4: GAIN = VIDEO/LOW −20
   BIAS = VIDEO/LOW
   (R GAIN is + 0)
2. Press the MEMORY key to save the data.

2-5. Adjustments in Replacement of Prism and Optical Unit

After replacement of the prism, set the factory mode, and perform the following adjustment.

2-5-1. V-COM Adjustment

1. Enter the P.DRV of the Device adjust with Factory mode.
2. Enter the item of 01 VCOM G, and check the 1 line ON/OFF signal.
3. Adjust the ← and → keys to minimize the flicker. Similarly, and perform Red and Blue adjustment similarly.
   (02 VCOM R, 03 VCOM B)
4. Select the SAVE TO MEMORY on the Device adjust page of the menu. Press the ENTER to save the data.

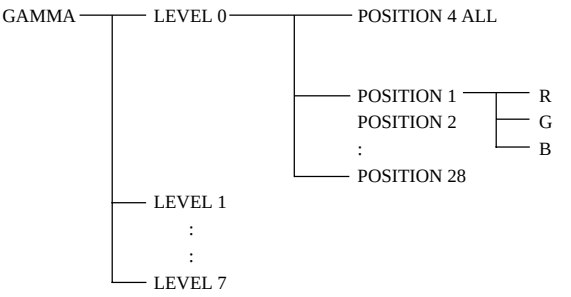
2-5-2. Polarization Plate Adjustment

Press the "PIC MUTE" button and the whole screen will become black. In this state, adjust the respective polarization plate until the black becomes the darkest.

2-5-3. 3D GAMMA Adjustment (Outline)

The principle of 3D GAMMA is described before the adjustment of 3D GAMMA.
3D GAMMA is like a function which can individually adjust W/B at a total of 180 points brightness 8 levels, horizontal direction 7 points, vertical direction 4 points (8*7*4=224 points).

So altogether 672 adjustments (224*3 (RGB)=672) will be required, which is in practice not possible. The following describes a simpler method.
First the "GAMMA" menu consists of the following hierarchy.



When adjusting a certain LEVEL, automatically the internal signal (flat field) of that level will be displayed.

2-5-4. 3D GAMMA Adjustments

1. First input "GAMMA."
2. Set LEVEL to 1.
3. Study the uniformity of the whole screen, and locate the areas where uniformity is poor.
4. Changing "POSITION" to 1, 2, or 3 will display the cursor. The position of the cursor is the position which will be adjusted.
   Move the cursor to the area with poor uniformity.
5. Move "R" and "B" up and down, and adjust so that the uniformity is the same as the other areas.
6. Set LEVEL 2.
7. Like steps 3, 4, and 5, adjust the areas with poor uniformity.
8. Adjust up to LEVEL 6.
9. Study the test pattern from LEVEL 1 to LEVEL 6, and if no problems, return to the first hierarchy, adjust the device, and save the data in SAVE TO MEMORY.

Precautions:

1. Basically adjust RED and BLUE only without changing GREEN.
2. Do not adjust LEVEL 7.
3. To set back factory settings should adjustments fail, skip "SAVE TO MEMORY," and turn off the power. All the adjusted data will be set back to factory settings.
   Factory settings cannot be set back however if "SAVE TO MEMORY" has already been implemented. So check the picture quality carefully prior to implementing "SAVE TO MEMORY."

4. For zoom lens, the uniformity will change slightly according to the zoom position.
   As uniformity will change slightly according to the F number of the lens, perform the adjustments on the projection system under the normal using conditions.
5. Do not change other items in the Device Adjust Menu.
   The device adjust menu contains important parameters for machine operations.
   Unnecessary operations will result in “no image” and “abnormal image.”
   “Factory reset” cannot be performed on device adjust menu items.
   (Implementing SAVE TO MEMORY will completely overwrite the data.)
   Do not change data unnecessarily.

Section 3
Descriptions of Circuit Board Operations

3-1. G/GA/F Boards

3-1-1. Outline

The G/GA/F boards make up the power supply unit.

- **F board**
  EMI filter for AC power supply line
- **G board**
  Comprises Active filter for improved power efficiency
  Main converter for the secondary circuit power supply
  Fan controller and power supply
- **GA board**
  Sub converter for the standby power supply.

3-1-2. Detailed Explanation

3-1-2-1. Active Filter Unit

This is an active filter using a current critical type rising voltage chopper system.
Custom IC (IC2001) contains the active filter control unit, chopper switching FET and the rectification diode components.
L2003 is the chopper choke coil and C2013/2014 are smoothing capacitors.
The output of the active filter is DC375V which is conducted via the secondary power supply converter and CN2002 to the lamp power supply board. IC2001 contains an OVP circuit which latches any oscillation that might occur if an abnormal rise in output voltage occurs and an OCP circuit which prevents flow of excess current.
IC2001 also contains heat protection functions that cut in if an abnormal rise of temperature occurs.

3-1-2-2. Main Converter Unit

This uses a compound current resonance unit.
Custom IC (IC2101) contains a converter control unit and a transdrive FET.
T2101 is a converter transformer and outputs +4.5V/ +6.0V/ +17.0V/ -6.0V/ FAN+B (13.0V).
These outputs are subjected to full wave rectification in the rectification circuits (D2201 to 2205 / C2202 to 2206), and are then output through line filters (L2201 to 2205/C2210 to 2214).
Stabilization of the output voltage is achieved by modulating the oscillation frequency and varying the resonance current in the primary coil.
Frequency modulation is achieved by detecting the +4.5V voltage variations with IC2201 and varying the oscillation frequency.
The control signal is passed via an isolating photocoupler (PH2102) to the controller IC where it is frequency modulated.
The primary drive circuit comprises a series resonance circuit formed by the primary coil of the converter transformer and the resonance capacitors (C2109/2110). When the load current through the secondary coil changes, the resonance point (frequency) of this resonant circuit is moved and the current which flows through the primary coil also changes. Owing to this characteristic, an increase in output load causes the current flowing in the primary coil to also increase so that the output voltage is stabilized.
IC2202 is an OVP circuit which latches the oscillation of the converter if the output voltage rises abnormally. Actually it stops the oscillator by turning the PowerCont signal off. IC2101 also contains an over current protection circuit (OCP) which latches if it detects an increase in primary coil resonance current due to shorting of the output etc.

3-1-2-3. Fan Drive Unit

The four fans inside the set are made to turn at high speed when the ambient temperature of the set is high and rotate at low speed when the temperature is low.
The rotation speed of the fan makes is controlled by varying the supply voltage of the fan. The actual control signal is sent from the CPU of the C board through CN2005. The input control signal is sent to regulator IC2302/2303 through the buffer of IC2301.
This regulator is a variable type series regulator. It subjects the input power supply (preceding FAN+B) to a voltage drop in accordance with the amplitude of the control signal, and then outputs it.
There are 2 output lines. The power supply for the Shirok fan in the center of the set is output from IC2302. All the other fans are driven by the output from IC2303.
Also, the circuit consisting of Q2301 to 2304 makes up a fan protection circuit that stops set operation if a fan stops due to some abnormality. When a fan stops, Q2301 switches off (opens) and the CPU turns off the set.

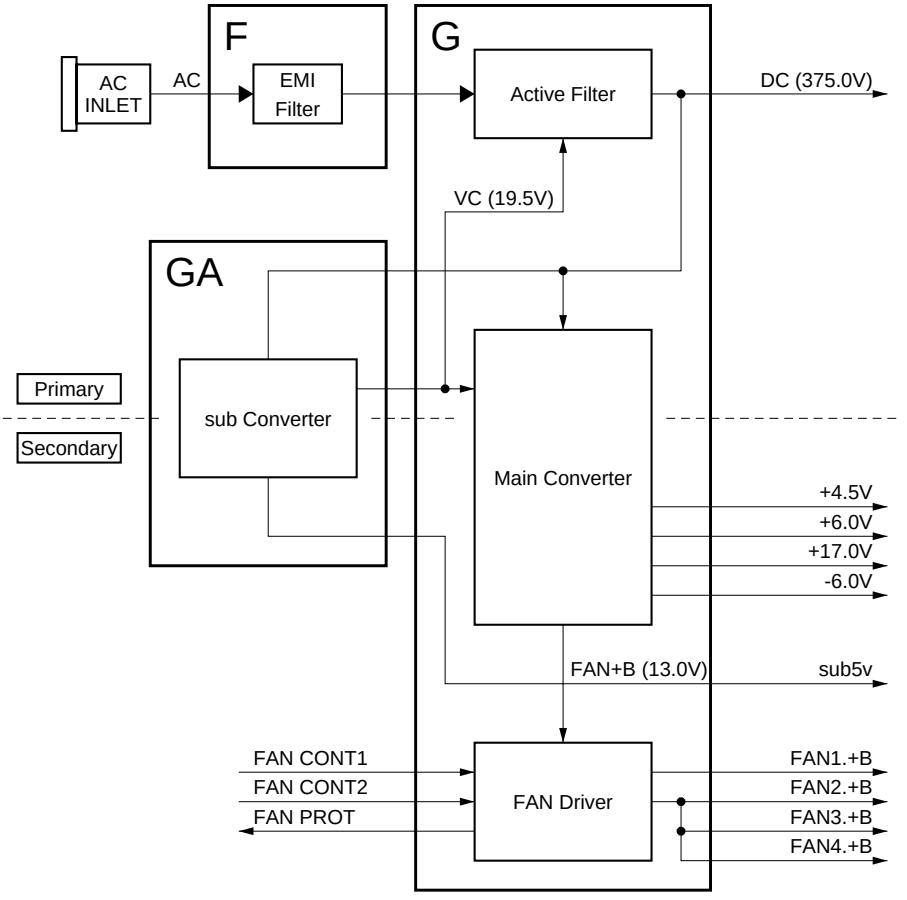
3-1-2-4. Sub Converter Unit

This uses a current resonance type converter using an DC/AC ferrite transformer.
The resonance circuit consists of T2602 sub converter transformer and orthogonal transformer T2601 and C2611.
The output from the secondary side of T2602 consists of sub 5V only, and after full wave rectification by the rectification circuit consisting of D2602/C2613 this is output through line filter (L2601/C2615).
The output from the primary side consists of Vcc (19.5V) only and is output through the rectification circuit of D2601/C2606.
Stabilization of the output voltage is achieved by detection of changes in the sub5V voltage by IC2602 and varying of the oscillation frequency. In reality, this is implemented by varying the current flowing in the secondary coil of the orthogonal transformer so as to move the resonance point (frequency) of the preceding resonance circuit.
IC2603 latches the sub5V output to about 2V by setting the control current of the secondary coil of the orthogonal transformer to its maximum value with the sub5V over voltage protection circuit (OVP).

3-1-2-5. The Detection of the Fan's Rotation Speed

Input the detection pulse of the fan's rotation speed from CN2008(pin 4). Input the IC5005(pin 28) of C Board through BM Board. The detection of the fan's rotation speed is performed when the power is on. The change (of the fan's rotation speed) is measured when the clogging of air filter is detected and alarmed.

Power Supply Block Diagram



List of Power Supply System Protectors

PROTECTOR NAME	ACTIVE CONDITIONS	ACTIVATION DETAILS	CIRCUIT LOCATION
Power Prot	TEMP/LAMP LED lights	Activates when the secondary output voltage is less than half. Activates when the 5V inside C board becomes less than 4.5V.	Q board IC4021 to IC4023
Mainconverter OVP	Same as P.Prot	Activates when the output voltage of the secondary rises abnormally. Stops the oscillation of the converter,so the output voltage becomes zero. P.Prot activates.	G board IC2202,Q2202 to 2204
Mainconverter OCP	Same as P.Prot	Activates when the output current of the secondary rises abnormary. Stops the oscillation of the converter,so the output voltage becomes zero. P.Prot activates.	G board IC2101,R2102
Subconverter OVP1	Control panel not effective	Activates when the sub5V voltage rises abnormally. The voltage becomes approximately 2.3V. The micro CPU operation latchs and the control panel becomes ineffective.	GA board IC2603,Q2603 to 2605
Subconverter OVP2	LED does not light	Activates when the primary Vcc rises abnormally. The standby power supply stops completely.	GA board D2605 When this activates, D2605 becomes deadshort.
Subconverter OCP	LED does not light	Activates when the sub5V current rises abnormally. The standby power supply stops completely.	GA board R2604 to 2605 When this activates, R2604 to 2605 opens.
PFC OVP	Same as P.Prot	When the PFC output voltage rises abnormally the PFC stops. At the same time the secondary converter stops, so the secondary output also becomes zero and P.Prot activates.	G board IC2001.
PFC OCP	Same as P.Prot	When the PFC output current rises abnormally the PFC stops. At the same time the secondary converter stops, so the secondary output also becomes zero and P.Prot activates.	G board IC2001.

- Most power supply system failures are detected by P. Prot.
- In addition to the protector activations described above, P. Prot is also likely to activate in response to power supply harness disconnection, BM board failures (BM has no adjustable) and converter circuit failures (not operational).
- If the F board fuse (F2500), R2003 on the G board opens, the cause is an abnormal PFC circuit or abnor mal lamp power supply. There is little possibility of this being caused by the secondary side power supply.

3-2. B Board

This board mainly performs the following processing.

- VIDEO (C-VIDEO, Y/C, 15k-COMPONENT,15k-RGB), video processing.
- Sync separation processing

3-2-1. Main IC Functions

3-2-1-1. MC141627FT (IC3010), Digital Comb Filter

Performs PAL443, PAL-M, PAL-N 3 line adaptation type digital Y/C separation.
For the operation clock, the clock (fsc) output from pin 46 of CXA2123 (IC3006) is fed in via pin 45 (IC3010).
The video signal fed in via pin 15 (IC3010) is digitally processed with this clock.
The resulting Y signal is output from pin 6, and the C signal from pin 8.

3-2-1-2. uPD64082 (IC3014), 3D Comb Filter

Performs NTSC 3.58 3 dimensional processing digital Y/C separation.
The reference clock uses the crystal (X3002) connected between pins 30 & 31, generates fsc and is output from the FSCO terminal (pin 47). It is then passed through a buffer into the FSCI terminal (pin 50). As the internal Y-ADC circuit cannot be used in this IC, the VIDEO signal subjected to A/D conversion by external A/D converter uP659AGS (IC3013) to give an 8 bit signal, is fed into pins 74 to 67. The Y signal is output from pin 84 and the C signal from pin 83.

3-2-1-3. CXA2123 (IC3006), Chroma Decoder & Sync Processing

This is a chroma decoder/sync processing IC controlled by the I^2C bus. It can process the C-VIDEO signal and the Y/C signal.
The C-VIDEO signal is fed into pin 1, the Y signal into pin 44 and the C signal into pin 43.
This allows automatic discrimination between NTSC 3.58, NTSC 4.43, PAL, PAL-M, PAL-N, SECAM and B/W.
When NTSC 3.58 is discriminated Y/C separation is performed by IC3014 (uPD64081).
When PAL, PAL-M or PAL-N are discriminated IC3010 (MC141627) is driven by a clock and performs Y/C separation.
They are respectively fed in via pin 5 and pin 7. In the case of other signals, this IC performs Y/C separation.
When NTSC4.43, SECAM or B/W are discriminated Y/C separation is performed by IC3006 (CXA2123).
Following this Y/U/V signal conversion is performed with Y being output from pin 21, U from pin 22 and V from pin 23.
Sync processing is performed by separating H and V from the input C-VIDEO/Y signal. H-sync is output from pin 9 and V-sync from pin 4.
In the case of 15k-COMPONENT, Y is input from pin 19, U from pin 18 and V from pin 17. Then Y is output from pin 21, U from pin 22 and V from pin 23. Sync processing is performed by separating H and V from the Y signal.
In the case of 15k-RGB, R is input from pin 27, G from pin 26 and B from pin 25. After conversion to Y/U/V, Y is output from pin 21, U from pin 22 and V from pin 23.
Sync processing is performed by separating H and V from the C.SYNC signal fed into pin 41.
In each case the H-sync signal output from pin 9 has been processed by a PLL so the equalizing pulse is removed.
This IC also controls DYNAMIC PICTURE ON/OFF.

3-2-2. Signal Flows

3-2-2-1. VIDEO Signal Flows

The VIDEO, Y/C signals input from CN3001 are fed into pins 1, 44 and 43 of IC3006.
In the case of PAL, PAL-M, PAL-N and NTSC 3.58, a signal amplified by a factor of 2 by IC3001 is output from pin 3.
PAL signals pass though the low pass filter consisting of Q3022, L3012, L3011, C3086, 3085 and 3084 and are fed to pin 15 of IC3010 (Comb Filter). Here Y/C separation is performed with Y being output from pin 6 and C from pin 8. These are passed though the low pass filters consisting of L3009, C3078, L3010 and C3079 then Y is fed to pin 3 of IC3007 and C is fed to pin 3 of IC3008.
NTSC 3.58 signals pass through low pass filter FL3009 and are fed to pin 4 of A/D converter IC3013.
The digitized signal is fed to 3D comb filter IC3014, then following Y/C separation Y is output from pin 84 and C from pin 83. After passing through low pass filters FL3008 and 3007, Y is fed to pin 1 of IC3007 and C to pin 1 of IC3008.

IC3007 and IC3008 switch between PAL/NTSC 3.58 and respectively output Y and C signals from their pin 7. This Y signal is fed to pin 5 of IC3006 while the C signal is fed to pin 7.
The remaining signals are all processed in IC3006 and converted to Y, U and V signals. Y is output from pin 21, U from pin 22 and V from pin 23. The signals are then output from the B board via buffers Q3009 (Y), Q3008 (U) and Q3007(V).

3-2-2-2. 15k-COMPONENT Signal/15k-RGB Signal Flows

The Y, Cb and Cr signals input from CN3001 pass though buffers Q3004, Q3003 and Q3002 and are fed to pin 19 (Y), pin 18 (Cb) and pin 17 (Cr) of IC3006. The signals fed in as Y, Cb and Cr are output unchanged from pins 21, 22 and 23. 15k-RGB signals likewise pass though buffers and are then fed to pin 27 (R), pin 26 (G) and pin 25 (B). The signals fed in as R, G and B signals are converted to Y, Cb and Cr signals which are output from pins 21, 22 and 23.

3-3. Q Board

The processing performed on this board is mainly as follows:

- Switching of the video signal
- Video signal input
- Sync separation processing
- Video, HDTV, DTV system image processing
- RS232C communication buffer
- Reception of remote control signal (SIRCS signal)
- Power protector

3-3-1. Outline of Main ICs

3-3-1-1. TLC5733 (IC4029), AD Converter for DRC Use

This is an AD converter for DRC processing. It inputs the Y/U/V signals output from the B board, and passes them as digital signals to CXD2090Q (IC433).

3-3-1-2. CXD2095AQ (IC4033), DRC Processing

CXD2095AQ(IC433) performs DRC (Digital Reality Creation) processing. It processes the digital signal passed from TLC5733 (IC4029) and outputs a D/A converted double frequency color difference signal.

3-3-1-3. CXA2101AQ (IC4013), HD Interface, RGB Matrix

This is controlled with the 1^2C bus. The input signals to this IC are the2Y/2R-Y/2B-Y DRC outputs, the Y/Cb/Cr double speed component signals, the HDTV, DTV system RGB signals or the YPbPr signals. The DRC output signals are fed into pin 23 (2Y), pin 22 (2B-Y) and pin 21 (2R-Y). The other signals are fed into pin 11 (Y or G), pin 10 (Pb or B) and pin 9 (Pr or R). After these signals have been input, they are internally switched and all are converted to Y/Cb/Cr. These are output from pins 76, 77 and 78, but are then fed back into the IC via coupling capacitors into pins 75, 74 and 73. The signals input in this way are subjected to COLOR, HUE and SHARPNESS user control adjustments. Other processing includes detection axis adjustment, chroma transient improvement and conversion and output as RGB signals. Sync separation for HDTV etc. (including 3 value sync) is also performed by this IC.

3-3-1-4. M52347FP (IC4006), SYNC SEPARATOR

This IC performs sync separation mainly for computer system signals and for signals other than those of the VIDEO, HDTV and DTV systems.

3-3-1-5. EL4332C (IC4007), RGB Switch, 6dB Amp, 75 Ohm Driver

Switches the video system, HDTV and DTV system signals that have been converted to RGB and the computer system RGB signals and outputs them to the C board.

3-3-2. Video signal Flow

3-3-2-1. VIDEO Signal Flow

The VIDEO and Y/C signals are fed respectively into pin 3 of NJM2533M (IC4022, IC4024 and IC4025). The selected VIDEO/S-VIDEO signal passes through the IC (switch) so that C-VIDEO emerges from CN406 (11), Y from (13) and C from (15).(These are sent to the B board via the BM board.)
The 15k-COMPONENT signal and 15k-RGB signal are input from INPUT-A or INPUT-B, and after selection by RY4001, RY4002 and RY4003 are output from CN4006 (19), (21) and (23). (These are sent to the B board via the BM board.) Of the signals processed on the B board, Y is input from CN4005 pin 25, U from pin 23 and V from pin 21. These signals pass through DRC pre-filters FL4006 (Y), FL4005 (U) and FL4004 (V) and are then fed into pins 63, 31 and 50 of AD converter TLC5733A (IC4029). Following this, they are subjected to algorithm processing in CXD20900 (IC4033), D/A conversion and then output as double speed frequency color difference signals from pin 105 (Y), pin 113 (U) and pin 109 (V).
After passing through post filters FL4003 (Y), FL4002 (U) and FL4001 (V) these signals are fed into pin 23 (Y), pin 22 (U) and pin 21 (V) of RGB matrix CXA2101 (IC4013). CXA2101 (3-1-3.) converts the signals to RGB signals and outputs R from pin 35, G from pin 37 and B from pin 39. These output RGB signals pass through buffers Q4021, Q4022 and Q4023 and are then selected by EL4332C (IC4007) which serves as a switch and 75 ohm driver IC. R is then output from CN4004 (A1, B1), G from (A3, B3) and B from (A5, B5).

3-3-2-2. HDTV/DTV (YPbPr, RGB) Double Speed Component (YUV) Signal Flows

The double speed component signals are input from INPUT-A or INPUT-B and after selection by RY4001, RY4002 and RY4003 pass though buffers Q4015, Q4016 and Q4017 before being fed to pins 11, 10 and 9 of RGB matrix CXA2101 (IC4013). CXA2101 (3-1-3.) converts the signals to RGB signals and outputs R from pin 35, G from pin 37 and B from pin 39. These output RGB signals pass through buffers Q4021, Q4022 and Q4023 and are then selected by EL4332C (IC4007) which serves as a switch and 75 ohm driver IC. R is then output from CN4004 (A1, B1), G from (A3, B3) and B from (A5, B5).

3-3-2-3. Computer Signal (RGB) Flows

The computer system signals (RGB) are input from INPUT-A or INPUT-B and after selection by RY4001, RY4002 and RY4003 are fed to EL4332C (IC4007) which serves as a switch and 75 ohm driver IC. After being selected by this IC, R is output from CN4004 (A1, B1), G from (A3, B3) and B from (A5, B5).

3-3-3. SYNC Processing Flows

3-3-3-1. When VIDEO Signals and 15k COMPONENT Signals are Processed

The H/V SYNC processed and output from the B board is passed via the BM board to CN4005 from which it is input from pin 19 (H) and pin 17 (V). The H/V SYNC is then passed through buffers Q4033 and Q4032 and fed to the DRC block.
CXD2095AQ (IC4033) outputs double speed processed H SYNC from pin 98 and V SYNC from pin 99. Following this, the sync is fed into CXA2101 (IC4013) via pin 7 (H) and pin 8 (V) and is then output from pins 29 and 28.
The output H-SYNC is inverted by IC4014 and is then fed to IC4012. Here noise is removed before it is output from pin 7. It is then fed to IC4011 for wave shaping and then to pin 17 of IC4009. Here CLP pulses are output from pin 5 of IC4012, inverted by IC4014, wave shaped by IC4011 and input to pin 15 of IC4009.
The V-SYNC is wave shaped by IC4014, then after inversion by IC4039 it is fed to pin 13 of IC4009. In IC4009 switching is performed with SYNC from the computer system and 3.3 V level conversion is performed. H is then output from CN4004 (A7, B7), V from (A9, B9) and CLP from (A11, B11).

3-3-3-2. When 15k-RGB Signal are Processed

COMPOSITE-SYNC is first subjected to sync separation in IC4003, then passed through relay RY4004 and subjected to wave shaping by Q4045 to Q4047 and IC4036 and IC4038, and is then fed to IC4006 (M52347FP). From here the COMPOSITE-SYNC is output as is, passes though buffer BUFF (IC4009) and after level matching is fed to pin 3 of switch C4027. It is then output from pin 7 of this IC and output as COMPOSITE-SYNC from pin 25 of CN4006. (It is then sent to the B board via the BM board.) It is then input from CN4005 in the form of H/V separate SYNC from the B board. Further processing is as for VIDEO.

3-3-3-3. When HDTV/DTV (YPbPr, GBR) Double Speed Composite Signals are Input

The H/C and V signals input from INPUT-A and INPUT-B are selected by relays RY4001 and RY4003. Following this H/C signals are switched by RY4004 and each signal is then passed though wave shaping circuits (Q4045 to Q4050, IC4036, IC4038). Then, after passing through BUFF (IC4010), H/C is fed to pin 7 of CXA2101 (IC4013) and V is fed to pin 8. Y/G is fed to pin 11. In IC4013, SonG (SonY) automatically determines if it is dealing with C. SYNC or HV separate provides outputs from pin 29 and pin 28. Further processing is as for VIDEO.

3-3-3-4. When Computer Signals are Processed

The H/C and V signals input from INPUT-A and INPUT-B are selected by relays RY4001 and RY4003. Following this H/C signals are switched by RY4004 and each signal is then passed though wave shaping circuits (Q4045 to Q4050, IC4036, IC4038). Then, H/C is fed to pin 6 of IC4006 (M52347) V to pin 8 and the G signal to pin 4. This IC performs sync separation and outputs H from pin 15, V from pin 13 and CLP from pin 17. These outputs are fed to IC4009. Here switching is performed with sync signals other than those of the computer system and 3.3 V level conversion is performed. H is then output from CN4004 (A7, B7), V from (A9, B9) and CLP from (A11, B11).

3-3-4. RS232C Communication Buffer

RS232C communication uses IC4002 (MAX202CSE) as a buffer. CN4001 allows connection to a computer.

The signals then pass through IC4002 and flow to the C board via CN4004 (A25, B25) and (A26, B26) to allow communication with the CPU on the C board.

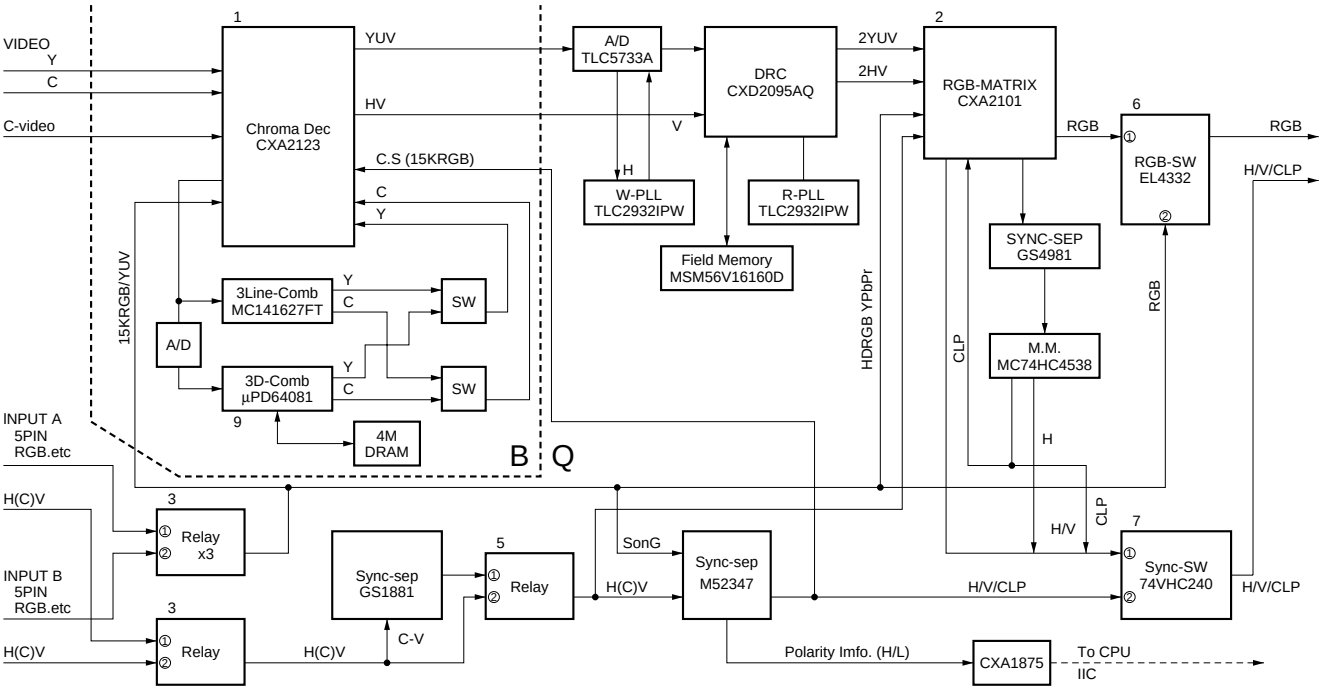
3-3-5. Reception of Remote Control Signal (SIRCS Signal)

Signals from a remote control unit connected with a cable are input via J4002. Following this, they are inverted by Q4003 and output to the C board via CN4004 (A21, B21). When a remote control unit is not connected, signals received by the NF, NR boards are input via CN4004 (A22, B22), pass though J4002 and are output to the C board via CN4004 (A21, B21).

3-3-6. Power Protector

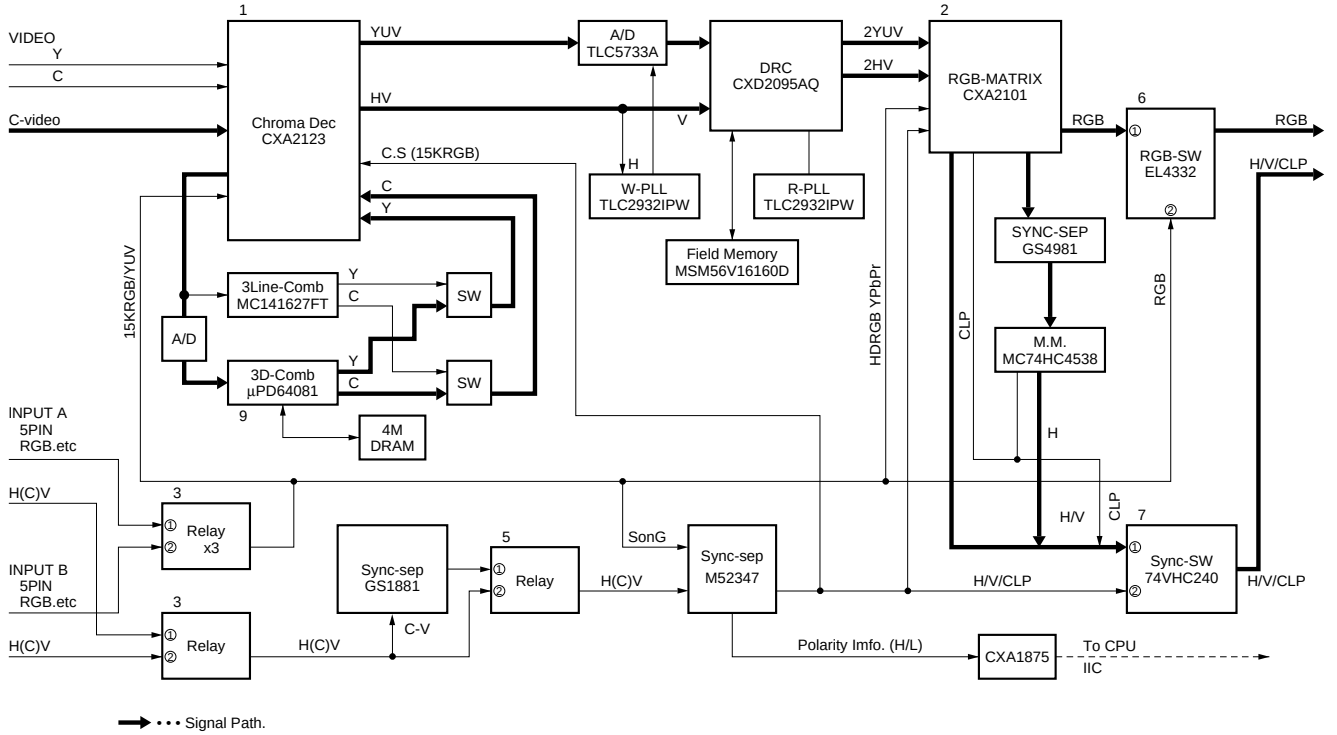
IC4021, IC4023 and IC4026 make up a protective circuit for the power supply lines.
If any of the -6V, +17V, +6V or +4.5V lines short to ground this circuit activates, outputs a high level (+5V) from pin 1 of IC4026 which is sent via CN4002 (A24, B24) to the microprocessor on the C board.

3-3-7. B Board, Q Board Block Diagram

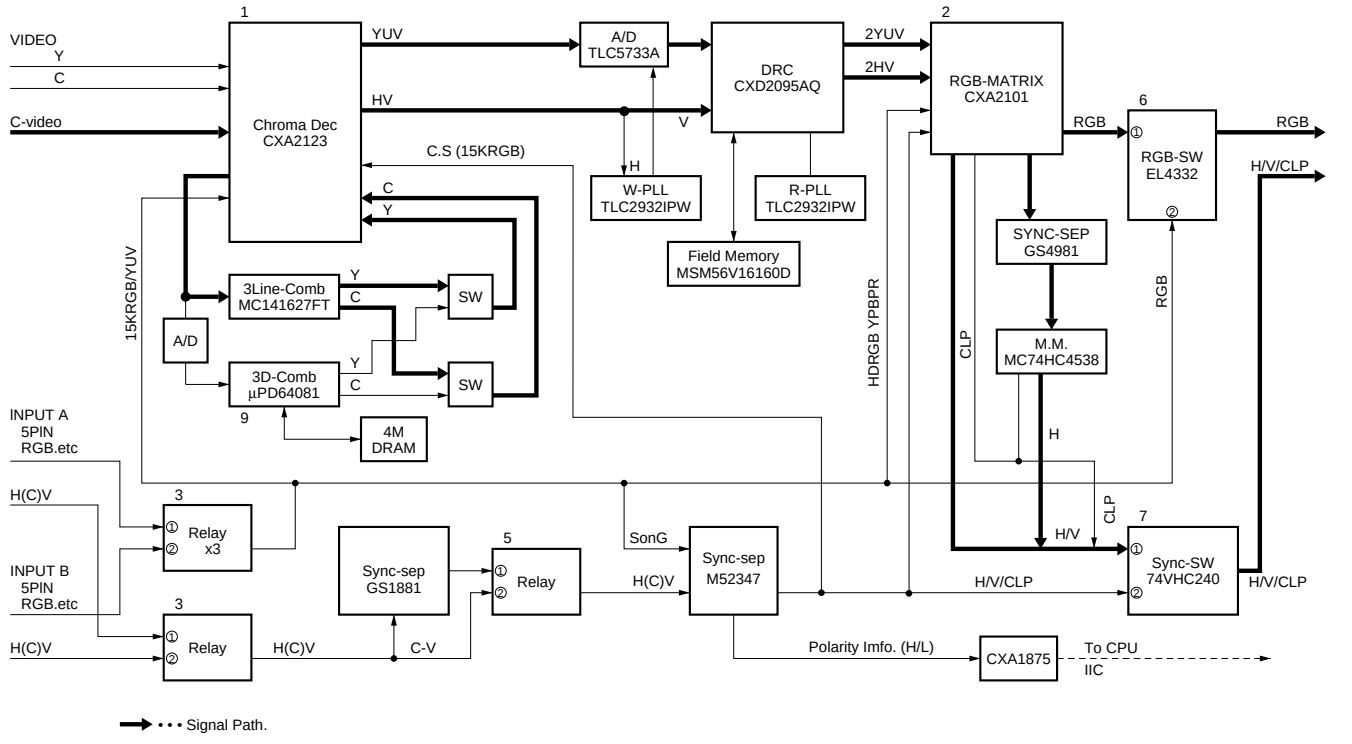


3-3-8. Signal Flow

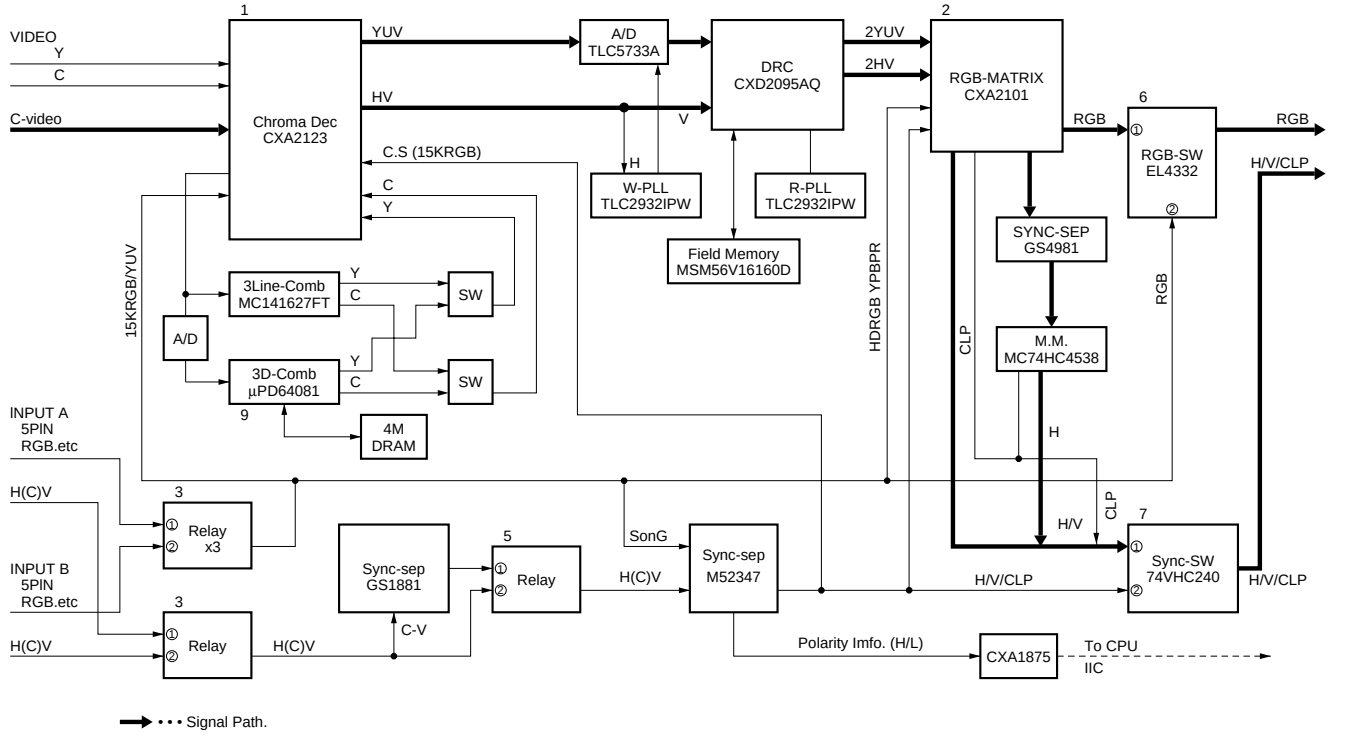
3-3-8-1. C-Video (NTSC3.58)



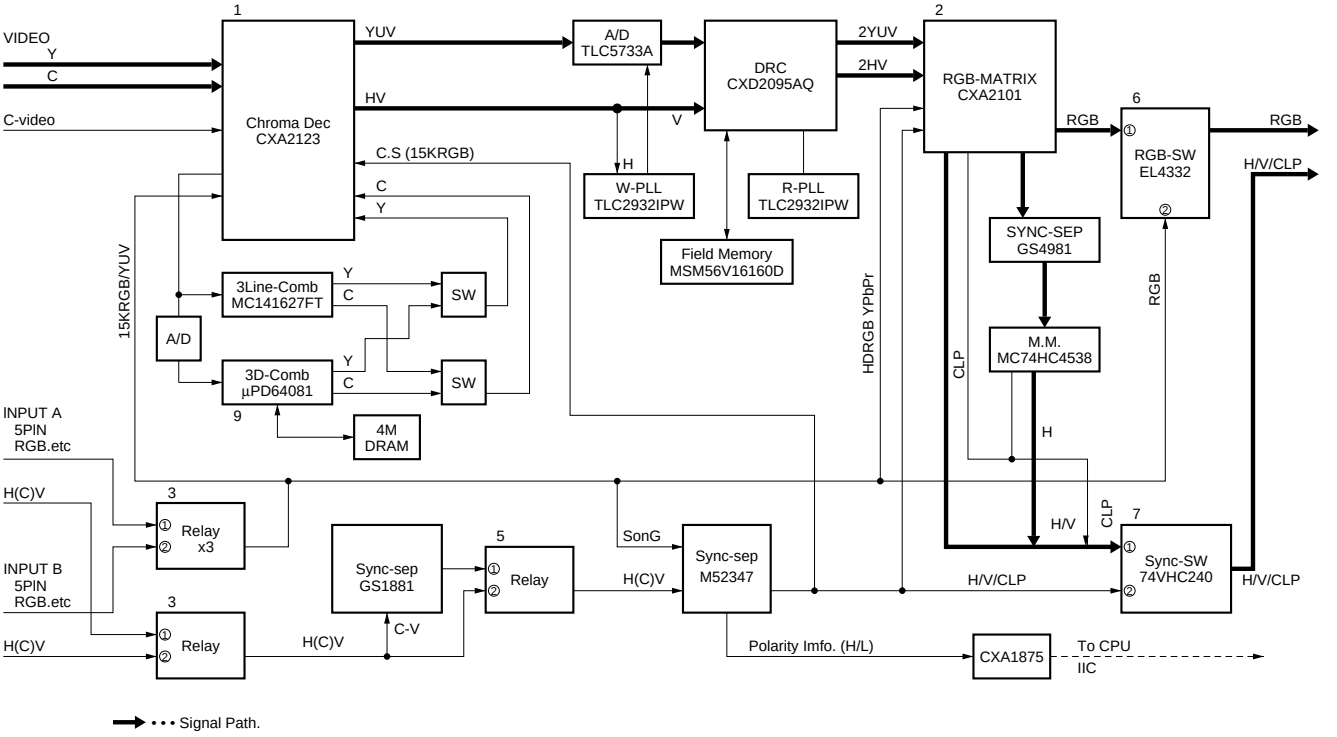
3-3-8-2. C-Video (PAL, PAL-M, PAL-N)



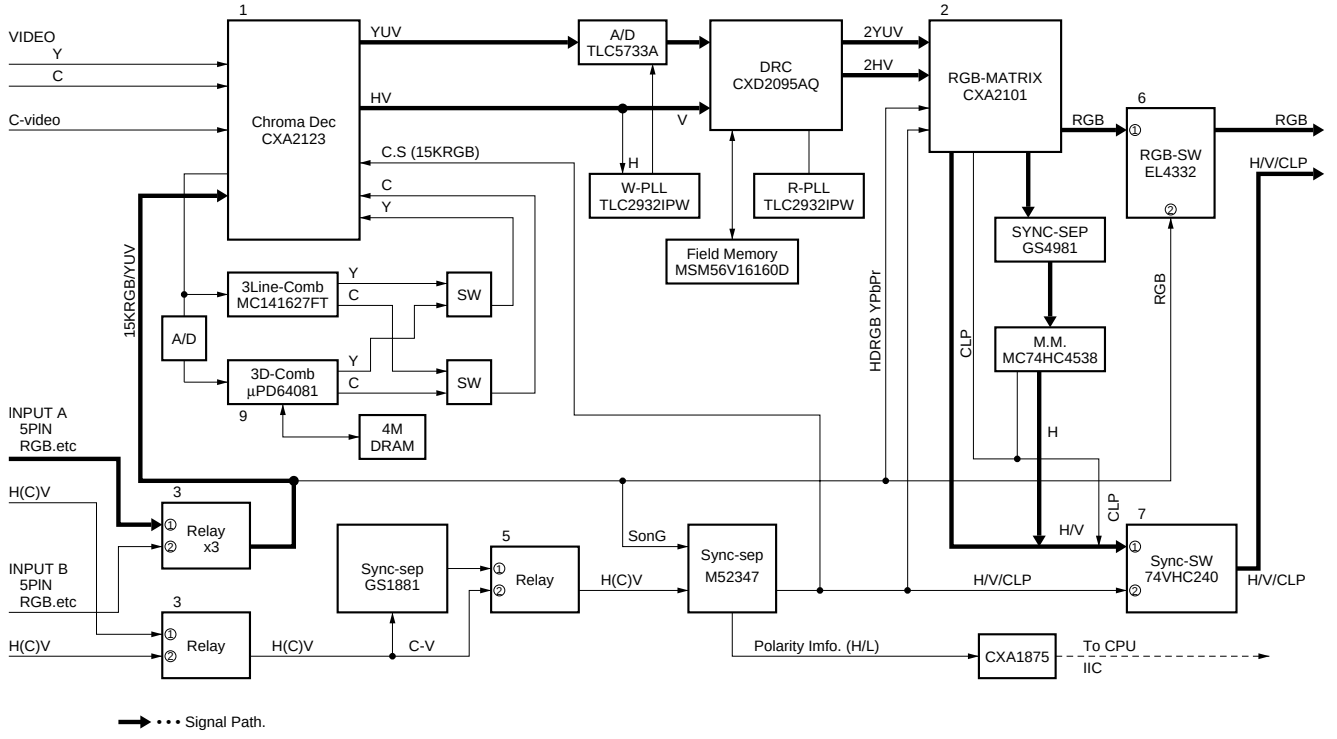
3-3-8-3. C-Video (SECAM, NTSC4.43)



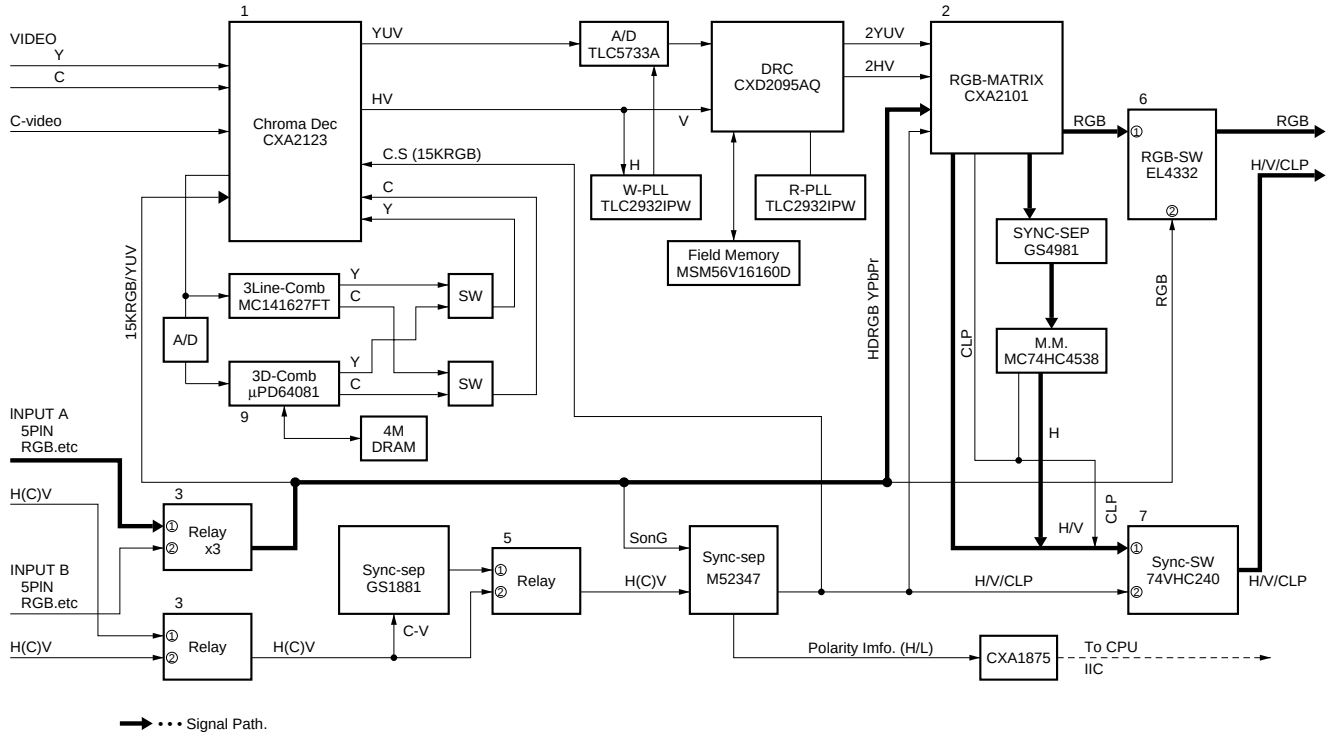
3-3-8-4. S-Video



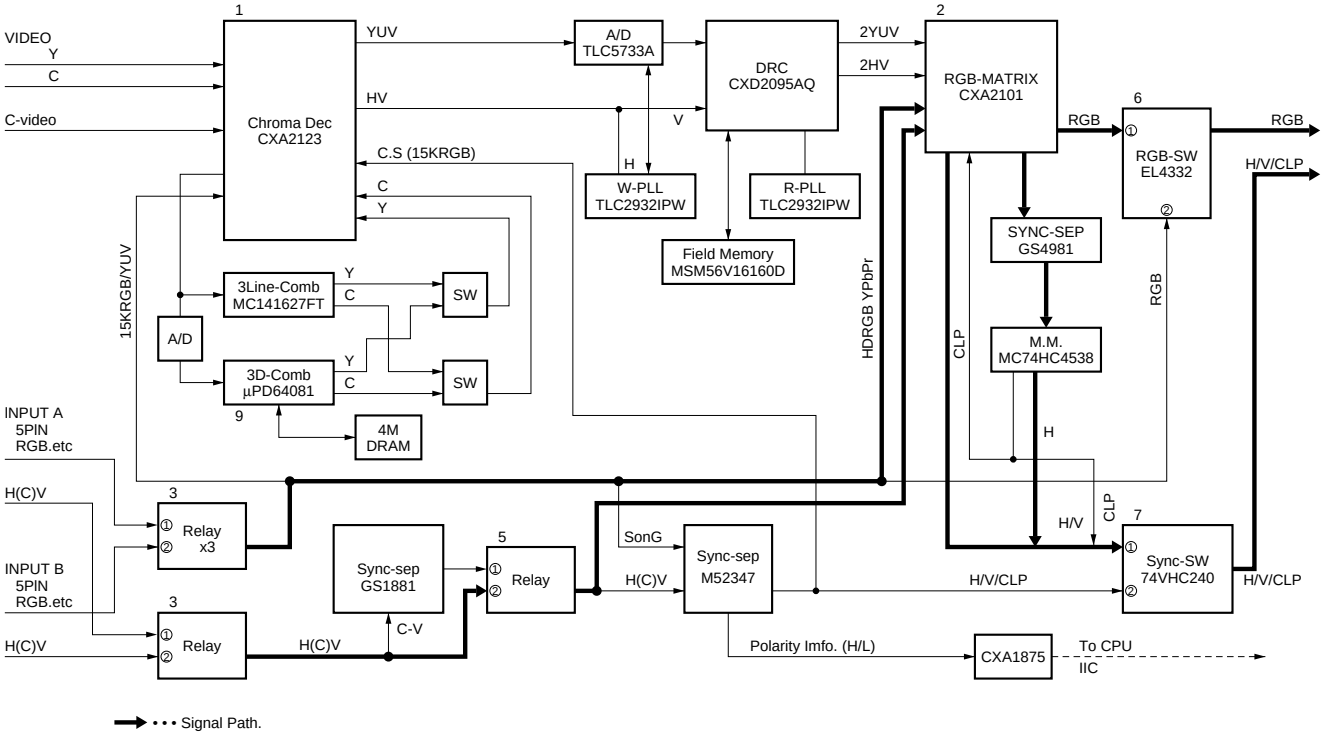
3-3-8-5. 15k-Component



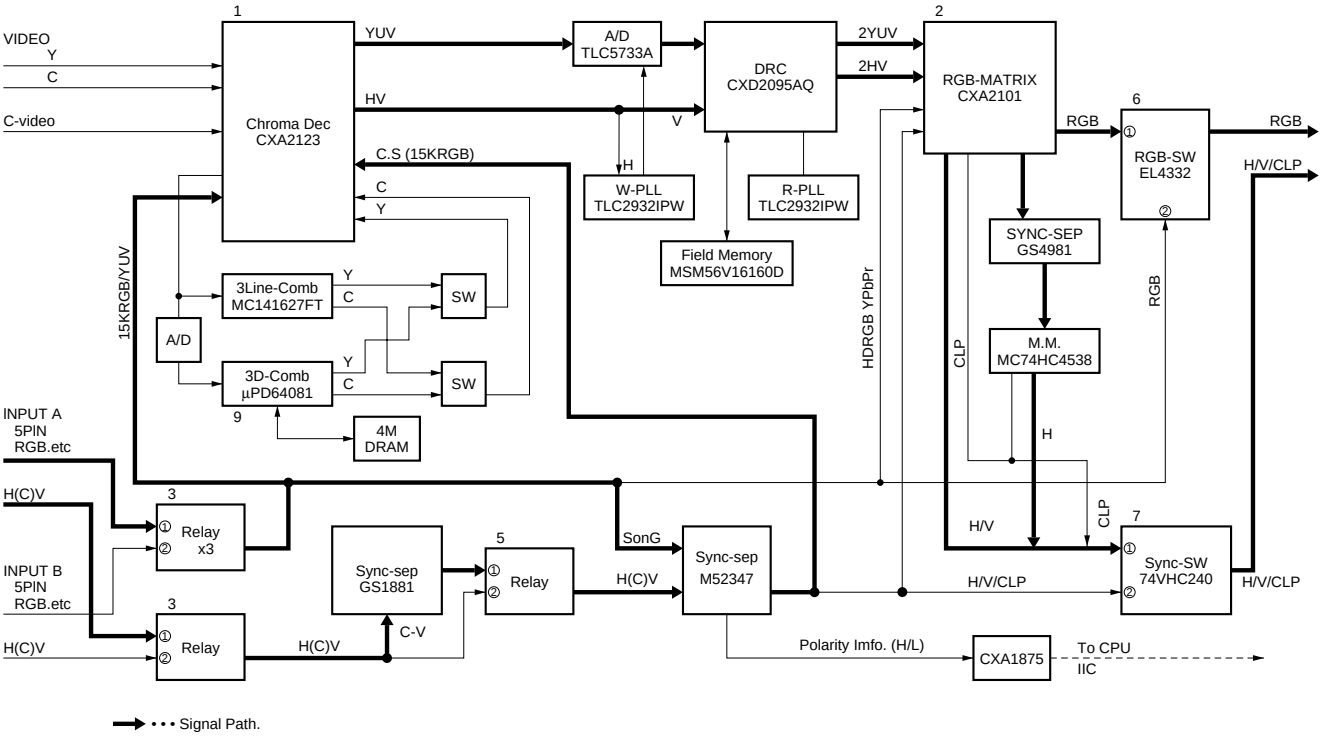
3-3-8-6. Double Speed Component



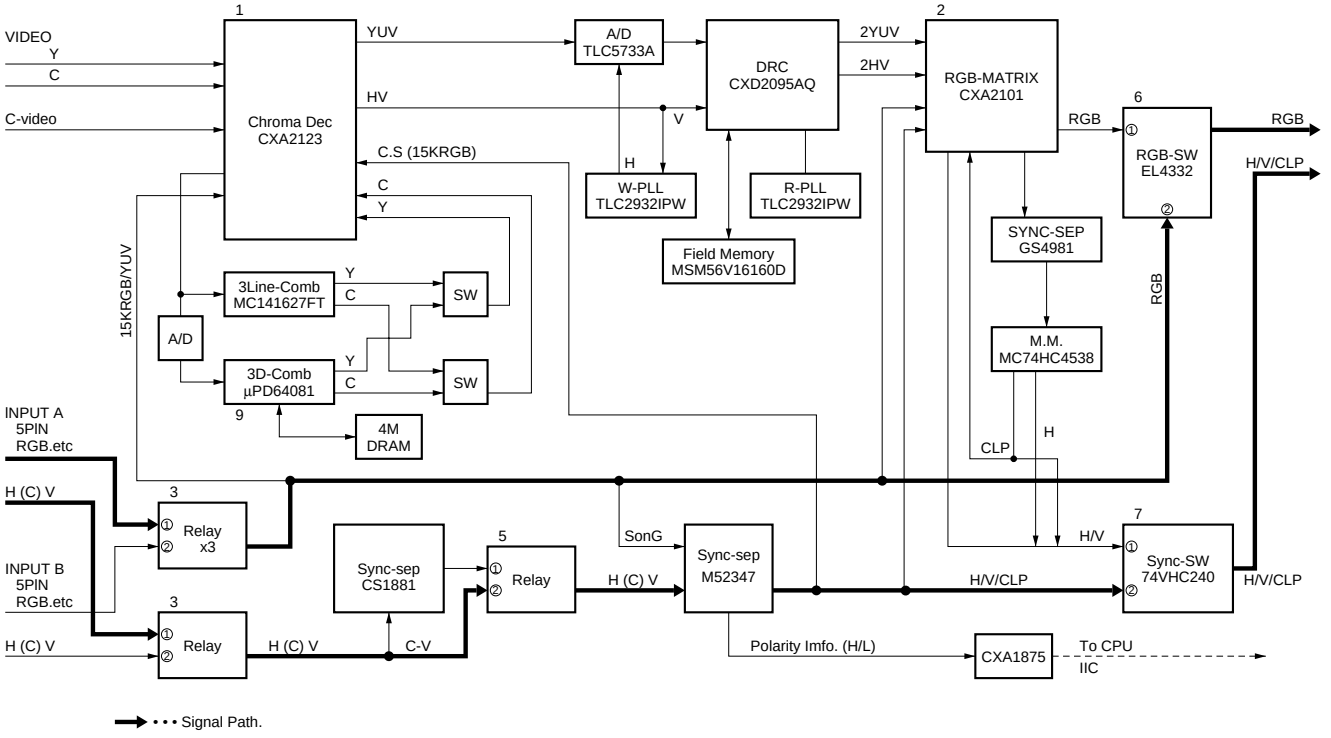
3-3-8-7. HDTV (GBR, YPbPr)



3-3-8-8. 15k-RGB



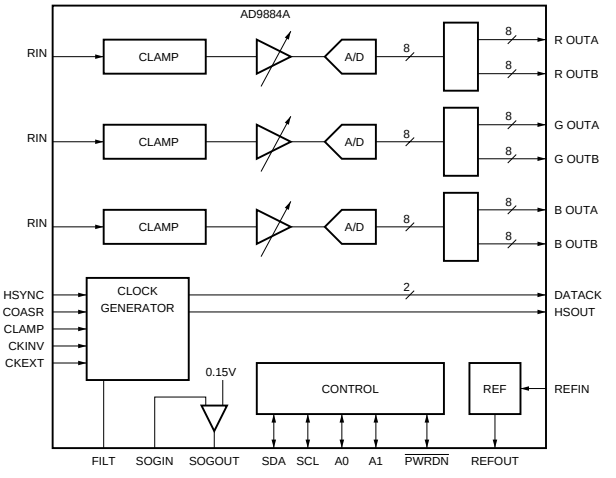
3-3-8-9. PC-RGB



3-4. C Board

3-4-1. A/D Converter Unit

IC5108 (AD9884A) is a maximum 140MS/s 8 bit x 3 color A/D converter containing a PLL and clamp amplifier.
It is controlled by an I2C signal (SDA, SCL: Slave address 98HEX) from PW264.
Control of dot phase and H size is obtained by controlling the clock generator via the I2C line, in accordance with settings appropriate for the input signal.
The CLAMP and VSYNC (COAST) from the Q board are input as pulses of positive polarity, while HSYNC is input as pulses of negative polarity.
Digital OUT is demultiplexed so ODD/EVEN pixel data are output in parallel.
At this time a _ sampling clock is also output for DATACK.

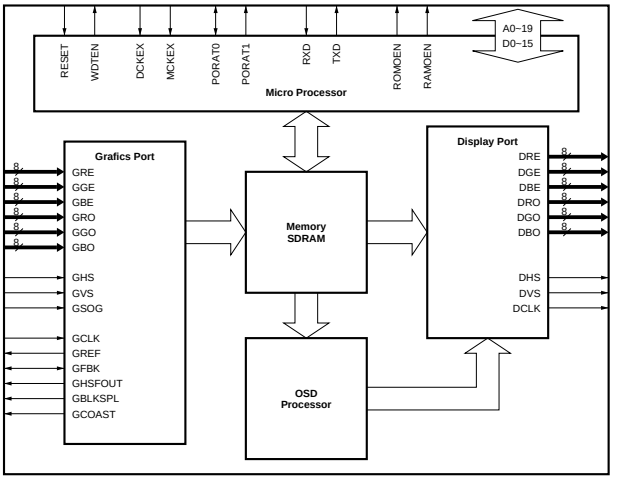


To reduce noise, the analog power supply VD of IC5108 (AD9884A) is stabilized and supplied by IC5101.
To further stabilize the PLL power supply (PVD), it is supplied from IC5120 LP2985-3 with which use can be made of a ceramic capacitor as the output capacitor.

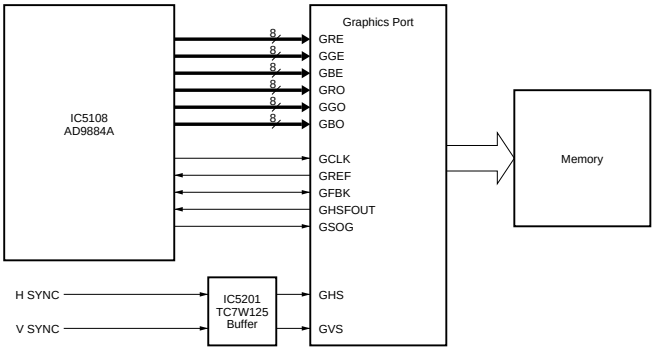
3-4-2. SCAN Converter

IC5202 (SCAN CONVERTER) inputs the RGB signals produced though digital conversion by IC5108 (AD9884A), converts them to signals appropriate for the panel resolution (WXGA: 1366 x 768) which it then outputs.
The OSD signals are also overlayed in this IC.

3-4-2-1. Internal Block Diagram (Simplified diagram: Unused parts omitted)

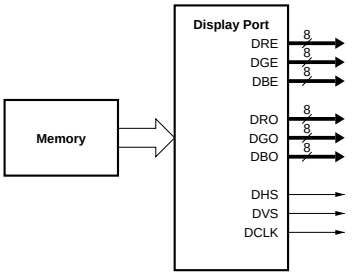


3-4-2-2. Graphics Port Block



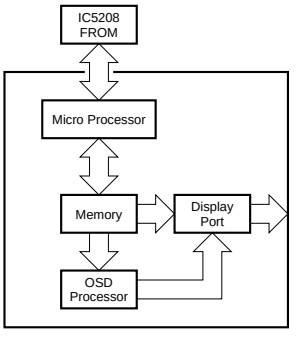
The graphics port subjects digital signals input in parallel from IC5108 (AD9884A) to multiprocessing then sends the data to internal SDRAM. It also generates pulses etc. that control the IC5108 (AD9884A) PLL section using the H,V sync input from the Q board.
The graphics port phase compares the H,V Sync and discriminates between interlaced and non-interlaced sync.

3-4-2-3. Display Port Block



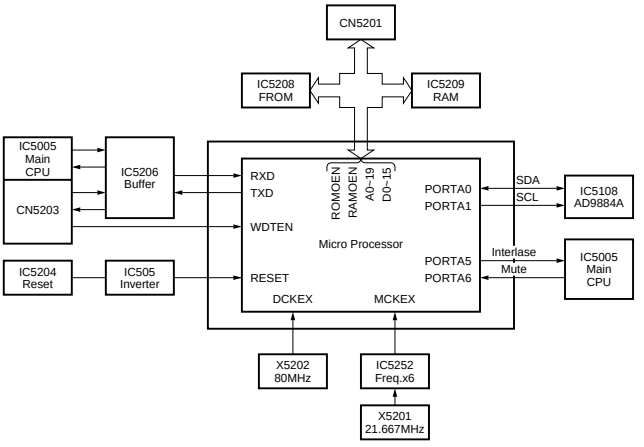
- Subjects data read from memory to enlargement and reduction processing so as to suit the resolution specified by output settings and outputs it according to the timing appropriate for the panel (ODD/EVEN parallel output).
- To read data from memory uses and processes MCKEXT (130MHz).
- Sets DHS, DVS and outputs at a frequency appropriate for the panel.However, for the moving image system DVS is synchronized with GVS, so their frequencies are the same (DVS=GVS(Hz)).
- DCLK is output at _ DCKEXT (40MHz = 1/2 x 80 MHz).

3-4-2-4. OSD MIX Processing



OSD data is stored IC5208 (MBM29LV400T) external memory. In response to commands from the Main CPU, PW264 selects and overlays display details.

3-4-2-5. Microprocessor Block



- The PROM in this block is externally connected and consists of 4Mbit (512KByte) of flash ROM (IC5208) and, for use as CPU RAM, 1Mbit (128KByte) of SRAM (IC5209).
  The external data bus is 16 bit and the CPU operates at 43.333 MHz obtained by dividing the 130MHz memory clock by 3.
- Connection of an RS232C level conversion board to CN5203 allows programs to be written into the external flash ROM. To do this, EXTSW must be connected to ground so as to switch the communication line, and WDEN must be connected to ground to disable operation of the WATCH DOG TIMER.
- PW264 normally operates as a sub CPU obeying commands from the Main CPU.
  The commands are transmitted using asynchronous serial communication using TXD/RXD.
- To increase the speed of signal switching operation, the MUTE signal is directly transmitted from the Main CPU to PW264.
  Also, the INTERLACE detection signal is directly transmitted from PW264 to the Main CPU.
- Because PW264 is an X86 based CPU, the RESET signal must be input at a HIGH level. For this reason, the open drain RESET signal from IC5204 (S-8028AMNP) is connected via an inverter.
- The 130MHz memory clock signal is obtained by multiplying the X300 21.667MHz signal by 6.
  The internal SDRAM operates at this frequency.
  Because the internal core operates at 2.5V, IC5103 (PQ20VZ1U) is used to drop the D3 3V to 2.5V.

3-4-3. Functions of Main ICs

3-4-3-1. CXD9512 (IC5304), 3D GAMMA ADJ, TG

This IC has 8bit x 6ch inputs and 10bit x 6ch outputs and is controlled by the CPU via the I2C bus.
Using g curve data (LUT) stored in an external EEPROM (IC5305) as reference data, it applies correction processing to a total of 28 points in rectangle measuring 7 points horizontally and 4 vertically. To allow 7 levels from 12.51RE to 87.51RE to be separately applied to R, G and B, it performs a total of 588 (28 x 7 x 3) adjustments.
To ensure an image data value of 0x3FF is equivalent to an RGB signal for 100% white, the 3D gamma gain needs to be adjusted.
Normal memory refresh is performed one word at a time by using the fall of V sync during each V sync cycle as a trigger. However when writing to E2PROM refresh is forcibly disabled.
A signal generator in the IC can generate test patterns such as hatch patterns, dot patterns and flat fields etc., but direct control by the I^2C bus allows stripes, gray scales and 9 steps etc. to also be output.
As contrast and brightness are varied with the GAIN and BIAS controls in the IC, these are varied for common use of images and OSD. However when the internal signal generator is operating, the OSD is generated inside the IC and does not depend on contrast or brightness.
The IC also generates the timing pulses required by the LCD driver and LCD panel.
The timing can be modified from the exterior via direct control of the I2C bus. The timing pulses output from the IC are 3.3Vp-p, so are converted to 5V by the externally connected VHCT541.

3-4-3-2. CXD3504R (IC5403), Dot-Line Inversion

The inputs and outputs of the IC have a 10bit x 2ch bus switch and 1H delay line (FIFO) for each separate RGB signal, which perform signal processing for a dot line inversion drive panel.
The bus switches switch between the odd and even lines so that one is alternately delayed by 1H, while the other is passed through. They also determine whether the output should be fed to an even pixel driver or an odd pixel driver. This switching is controlled by feeding RGT, RGT and DWN into the SELAR, SELAG, SELAB and SELB terminals.
For timing pulses a half dot clock (40MHz) HD is input. Also, to provide a line memory reset signal, a low signal is fed to pin 11 for approximately 10msec after the power on TG operation has stabilized.

3-4-3-3. ADV7123 (IC5501, 5502), D/A Converter

Use is made of two 10bit x 3ch D/A converters which convert the GAMMA corrected signal to analog form.
For the range 0x000 to 0x3FF, they output approximately 0.88Vp-p.
For timing pulses they are fed a half dot clock (40MHz).

3-4-3-4. M52749 (IC5504, 5505), RGB Amp

By adjusting the BIAS and GAIN this circuit determines the pure white level and pure black level (dynamic range) of the analog signals fed to the panel drivers.
The adjustment parameters include main BIAS, main GAIN and sub GAIN. Main is a common adjustment for the 3 channels, sub has separate settings for each channel.
Also, using the internal DAC, DLY-CNT, CAL_R and SID_IN (DC voltage) can be fed to the LCD drivers.
The respective parameters settings are controlled from the microprocessor via I^2C.
Because the slave addresses of IC5504 and IC5505 overlap (at 0x88) separate I^2C buses are used.
To reduce the noise generated by this IC, the signals are amplified somewhat more than necessary by the amplifier section, and attenuators are connected to the outputs for each channel to improve the S/N ratio. Because the temperature drift of these attenuators (buffers) are a problem, the DC fed to the MBRT terminal is passed through the same transistor used in the buffers so that the temperature drift of VBE can be used for correction.
Further, differences in brightness between odd pixels and even pixels (appearing as stripes) generated by the LCD panel and variations in the LCD drivers, are eliminated by adjustment of the sub GAIN of the IC. These brightness variations appear differently during scanning in the upward and downward direction, so adjustments are made for both the upward and downward directions, and stored separately in memory.

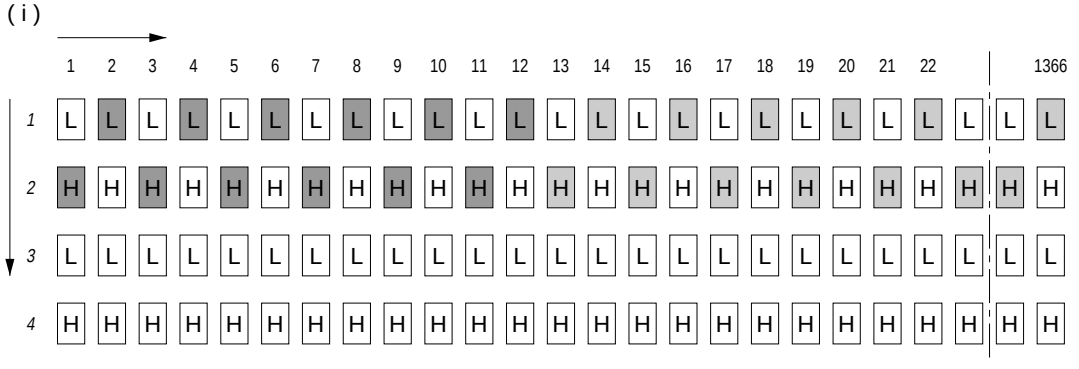
3-4-3-5. CXA3512R (IC5601, 5602, 5701, 5702, 5801, 5802), LCD Driver

To draw the odd pixels and even pixels, each RGB channel has 2 LCD panel drivers.
The signal input by VIDEO_I is amplified by a factor of about 2 by an inverting amplifier, and is sampled and held by the S/H pulse generated by the internal TG. Following this it is further amplified by about 1.5 times and is output to the panel with separate timings SH1 to 3 and SH4 to 6.
Centered on the SIGCEN voltage, the signal is folded with FRP timing so as to give a signal whichis inverted every 1H.
CAL_R is an input terminal for a refresh signal used to cancel the offset between output channels, and is set by the DAC.
MCLK and $\overline{\text{MCLK}}$ are dot clock inputs and because this system is 2 para, input 40MHz.
They can input either PECL or TTL signals.
Control of sample and hold phase is performed by POSCTR1, POSCTR2 and DLYCTR.
POSCTR used 4 value discrimination, so two ports allow 4 x 4 (i.e. 16) settings.
Control of POSCTR allows 16 dot variation but the do lineinversion panel can operate correctly only every other time, so actually only 8 settings are possible.
Input of 3 to 5V to DLYCTR allows phase to be continuously varied within one dot by up to 360∞.
DIRCTR is a terminal for setting the left/right scan direction and inputs either RGT or $\overline{\text{RGT}}$.
SID_IN is an input terminal for the pre-charge signal waveform. As the input waveform for the panel a single step is suitable, so a DC value is input under DAC control.
The signal input from SID_IN is folded with FRP or $\overline{\text{FRP}}$ and output from SID_O.
In the case of the pre-charge signal, a certain current flow is required, so rather than connect SID_O directly to the panel, it is connected via a push-pull buffer.
When VCOMOFF is at 0 volts, VCOMOUT outputs a potential equal to the voltage input to SIGCNT.
Furthermore, when the voltage at VCOMOFF is raised to 10V, VCOMOUT outputs approximately SIGCNT - 3V.

3-4-3-6. LCX037 LCD Panel

This LCD panel uses the dot-line inversion drive method and dramatically reduces cross talk (window bands) in the H direction.
The effective pixel area measures 768 pixels vertically by 1366 horizontally, but in addition the panel has margins 4 pixels wide on the left and right, and 2 pixels wide at the top and bottom containing dummy pixels.

1. Dot-line Inversion Panel Write

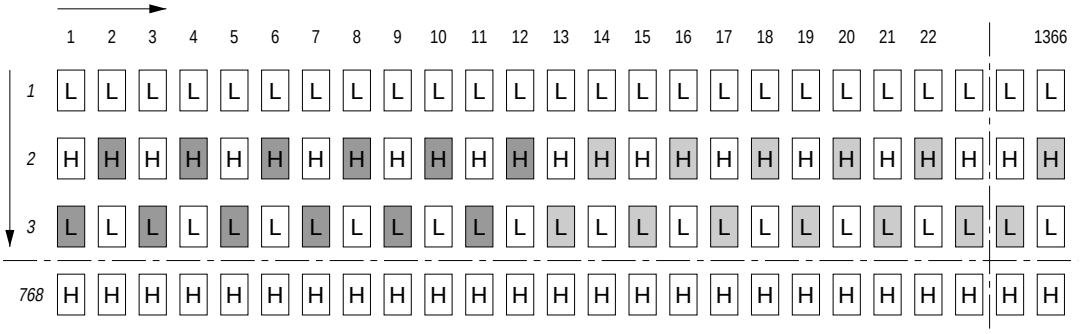


When scanning in the direction of the arrow. Dots 2, 4, 6, 8, 10 and 12 of the line 1 and dots 1, 3, 5, 7, 9 and 11 of line 2 are written simultaneously. During the next timing period dots 14, 16, 18, 20 and 24 of line 1 and dots 13, 15,17, 19, 21 and 23 of line 2 are simultaneously written.
After writing dot 1366, a start is made on writing lines 2 and 3. L and H indicate polarity. Inspection of the two lines which are simultaneously written reveals that though the lines do not match, the dots written are of opposite polarity (dot inversion).
Owing to use of the CXD3504R (IC5403) line memory, the first line is delayed by 1H relative to the second line.

Because of this, even though the two lines are written simultaneously, the picture is correctly displayed.

Lines 2 and 3 are written in the same way as lines 1 and 2, and this process is repeated until 768 lines have been written. When line 768 is filled in, line 769 (a dummy line) is simultaneously written. Also, when line 1 is filled in, line 0 (a dummy line) is filled in. Since polarity is inverted on adjacent lines (line inversion), the above system is referred to as the dot-line inversion drive method.

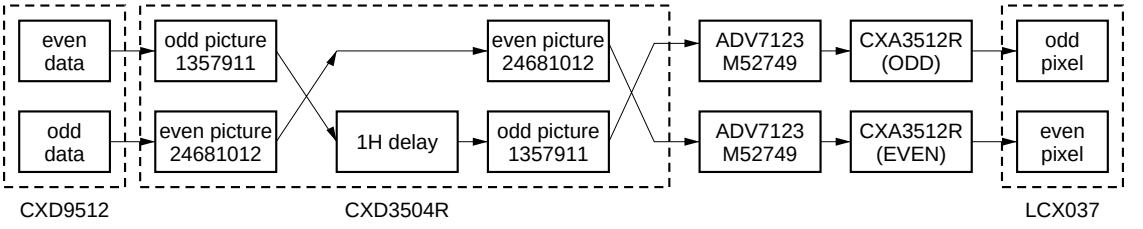
(ii)



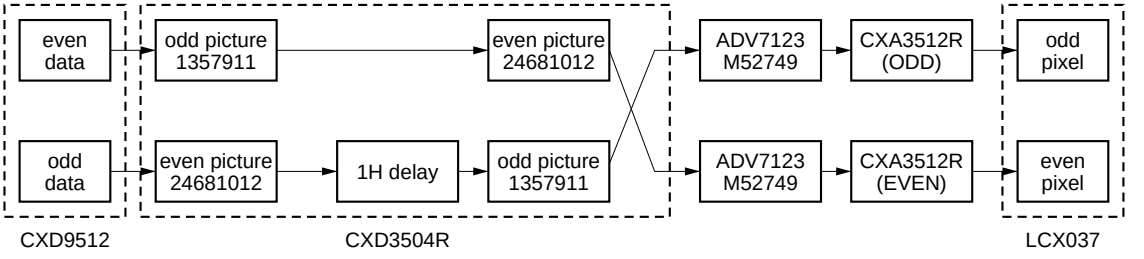
3-4-4. Signal Flow

3-4-4-1. Between CXD9512 to LCD Panel

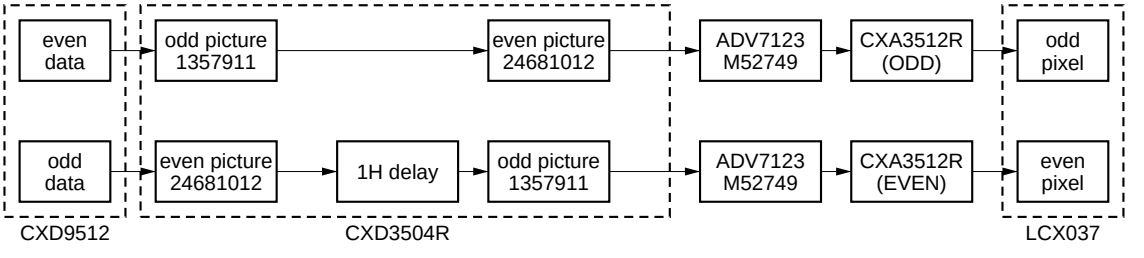
1. Floor-Front (R/B), Floor-Rear (G)



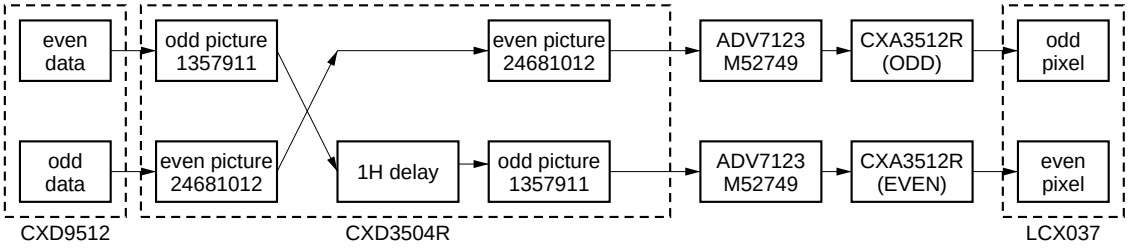
2. Floor-Rear(R/B), Floor-Front (G)



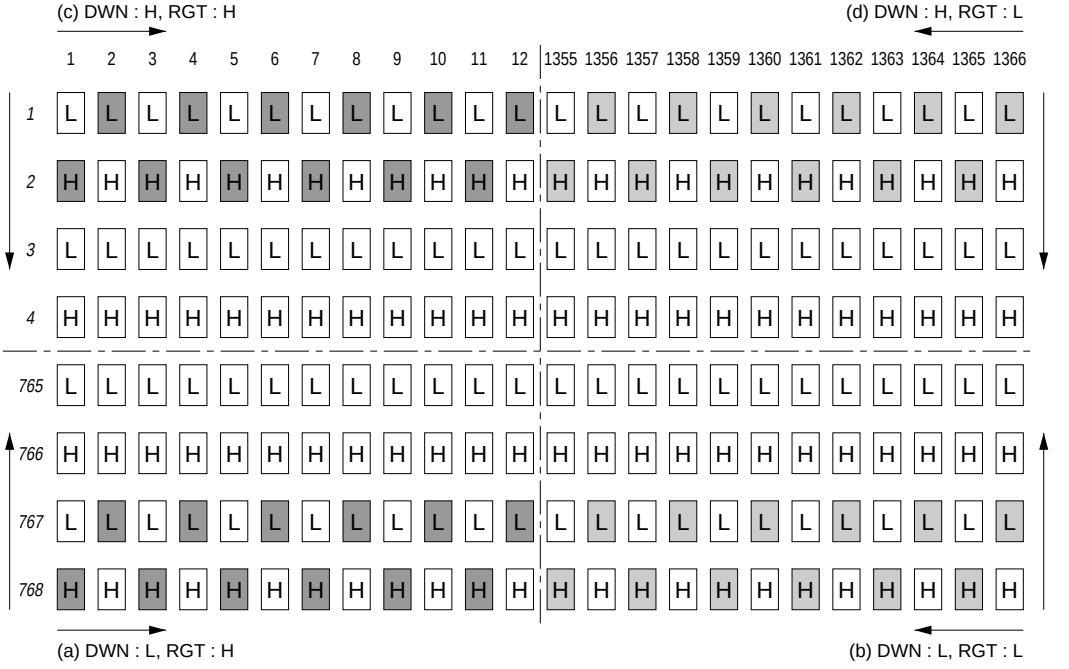
3. Ceiling-Front (R/B), Ceiling--Rear (G)



4. Ceiling-Rear(R/B), Ceiling--Front (G)

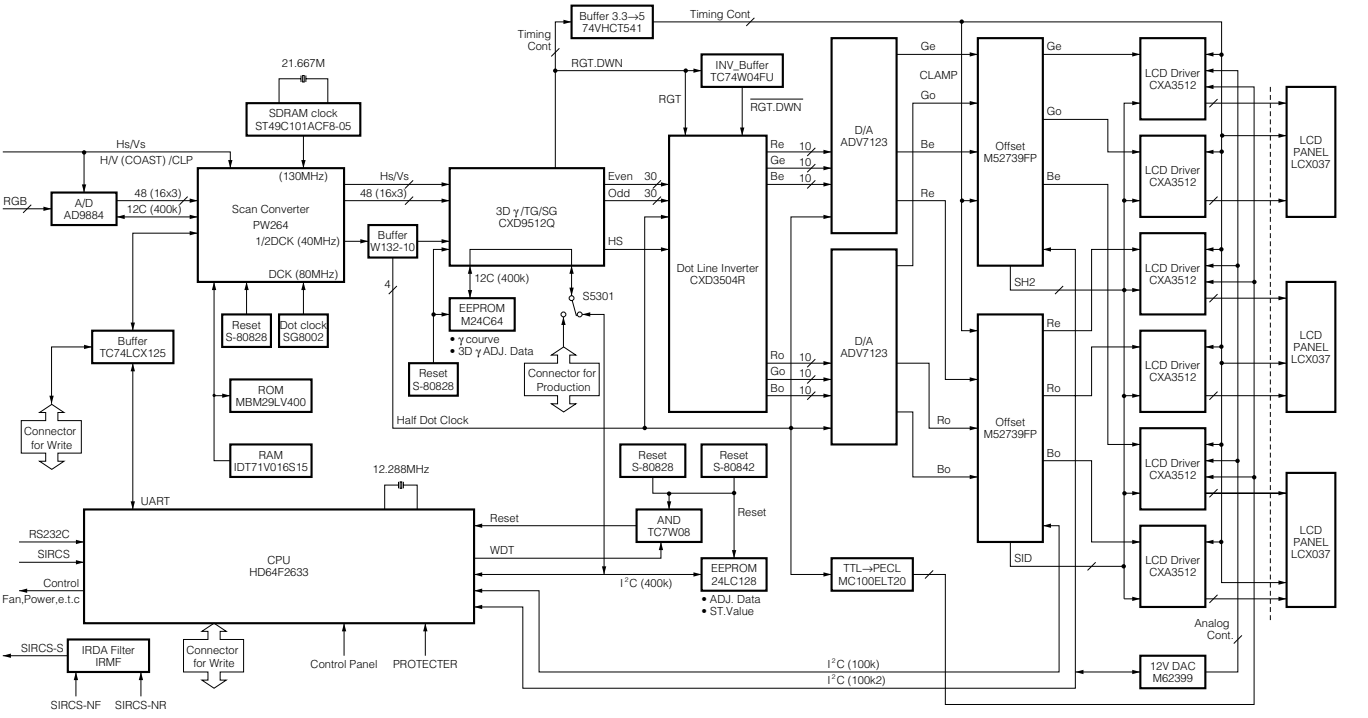


3-4-4-2. LCD Panel Write Sequence



When scanning from bottom to top in the diagram, oddnumbered images are always delayed by 1H, whereas when scaninning from top to bottom even numbered images are delayed by 1H.
Also, when scanning from left to right in the diagram, odd numbered images are filled in with odd pixels, whereas when scanning from right to left odd numbered images are filled whith even pixels.

3-4-5. C Board Block Diagram

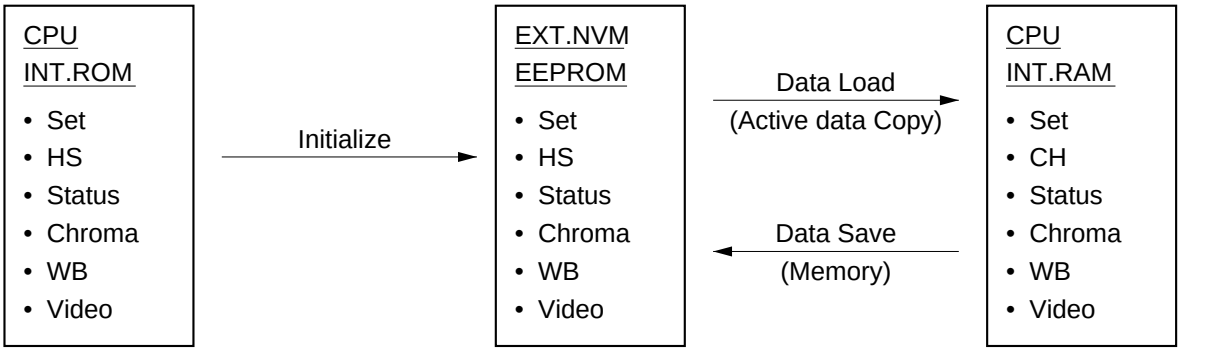


3-4-6. Memory Composition

3-4-6-1.Memory Composition

Device Name	Device Type	Ref. No.	Data Content
CPU Internal ROM	256kbyte Flash Memory	C Board IC	Initialization values
CPU Internal RAM	16kbyte RAM	C Board IC	Active data (Data that can be set or adjusted)
External NVM Memory	16kbyte EEPROM	C Board IC	Saved data (Values of settings and adjustments)

Basic Memory Data Access



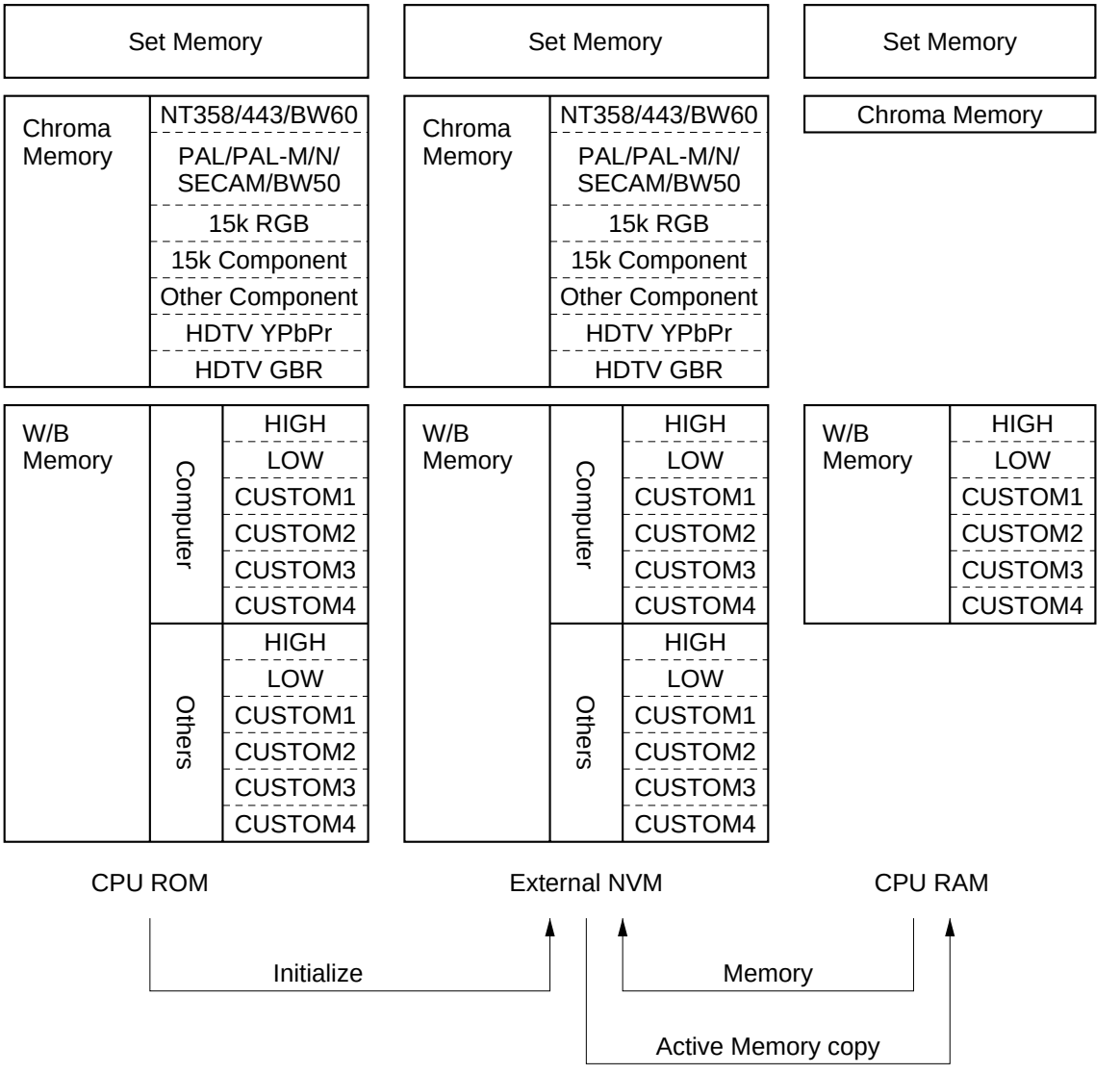
The memory structure of the VW12HT is based on earlier models in the VPL-X600 series, with part of the structure following the memory structure adapted to the home theater VPH-D50HT series.
The memory devices are distributed into three areas as shown in the table above.
Each memory device contains only one kind of memory, which is divided into 6 blocks as shown below, but some memory blocks (Staus, Chroma, WB) contain different amounts of memory.

- SET memory
- CH memory
- STATUS memory
- CHROMA memory
- W/B memory
- VIDEO memory

A simple explanation of the data flow is as follows.
When the power plug is first plugged in when the set is in the Factory Standby state, all the data in the internal ROM is copied into the external NVM memory (non-volatile memory: EEPROM).
When Power ON occurs, the memory data required by the current input signals and set state is selected from the above mentioned blocks and expanded into internal RAM.
When selection settings and adjustments are performed here, those settings and adjustment data items that are effective in User mode or effective in Service/Factory mode (W/B, Device Adjust) automatically trigger memory operation (when “Save To Memory” is selected on the Menu screen) so that they are written into and stored in non-volatile memory.
In User mode, Reset is an effective adjustment item. When Reset is performed the system returns to the initialization values in internal ROM. These are the valuesset when the set is shipped from the factory.
In Service/Factory mode, Reset is not effective and as adjustment of various items and memory operations are stored at this time in the NVM memory, care must be taken not to lose either the factory adjustment data provided when the set was shipped from the factory, or any previously saved data.

3-4-6-2. Memory Structure and Data Access

1.Set • Chroma • WB Memory



SET MEMORY

Last CH
STATUS ON/OFF
INPUT-A Setting
INPUT-B Setting
LANGUAGE Setting
POWER SAVING ON/OFF
SIRCS RECEIVE Setting
CINE MOTION Setting
KEYSTONE MEMORY ON/OFF
DIGITAL KEYSTONE
INSTALLATION Setting
CINEMA BLACK ON/OFF
LAMP TIMER
OPERATION TIMER
PREVIOUS LAMP TIMER
DEVICE Data
FORIGINAL Data
(Filter Cloggy Data)
Etc

CHROMA MEMORY

CHROMA Device Data
Etc

W/B MEMORY

R/G/B GAIN
R/G/B BIAS

Obtain the set value of the warning of the clogging of the filter

Under the condition of STANDBY, press the set command (RESET + MENU + ↓ + ENTER) of the clogging of the filter to make it POWER ON. In this condition, set Åuthe FAN's maximum rotation speed + correcting valueÅvas the reference value FORIGINAL of justifying the warning of the clogging of the filter.

2. CH• Status• Video Memory

Channel Memory	Video
	S Video
	Input-A
	Input-B

Channel Memory	Video
	S Video
	Input-A
	Input-B

Channel Memory

Status Memory		
	No.01	
	No.02	
	INPUT-A Preset	No.03 ... ... No.50
	INPUT-B Preset	No.03 ... ... No.50

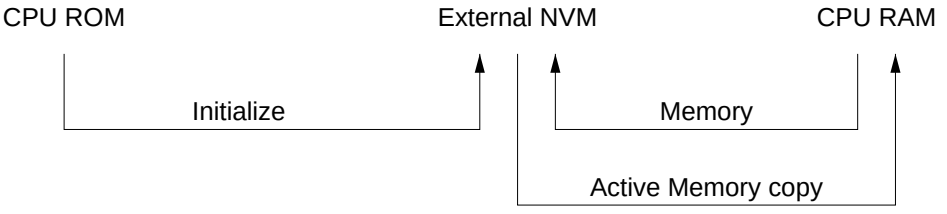
Status Memory		
	No.01	
	No.02	
	INPUT-A Preset	No.03 ... ... No.50
	INPUT-B Preset	No.03 ... ... No.50
	INPUT-A User	No.71 ... No.90
	INPUT-B User	No.91 ... No.110

Status Memory

VIDEO Memory	
	No.1
	No.2
	No.3
	No.4
	No.5
	No.6

VIDEO Memory	
	No.1
	No.2
	No.3
	No.4
	No.5
	No.6

VIDEO Memory



CH MEMORY
- CONTRAST
- BRIGHT
- COLOR
- HUE
- SHARPNESS
- RGB ENHANCER
- DYNAMIC PIC
- COLOR TEMPRATURE
- COLOR SYSTEM

STATUS MEMORY

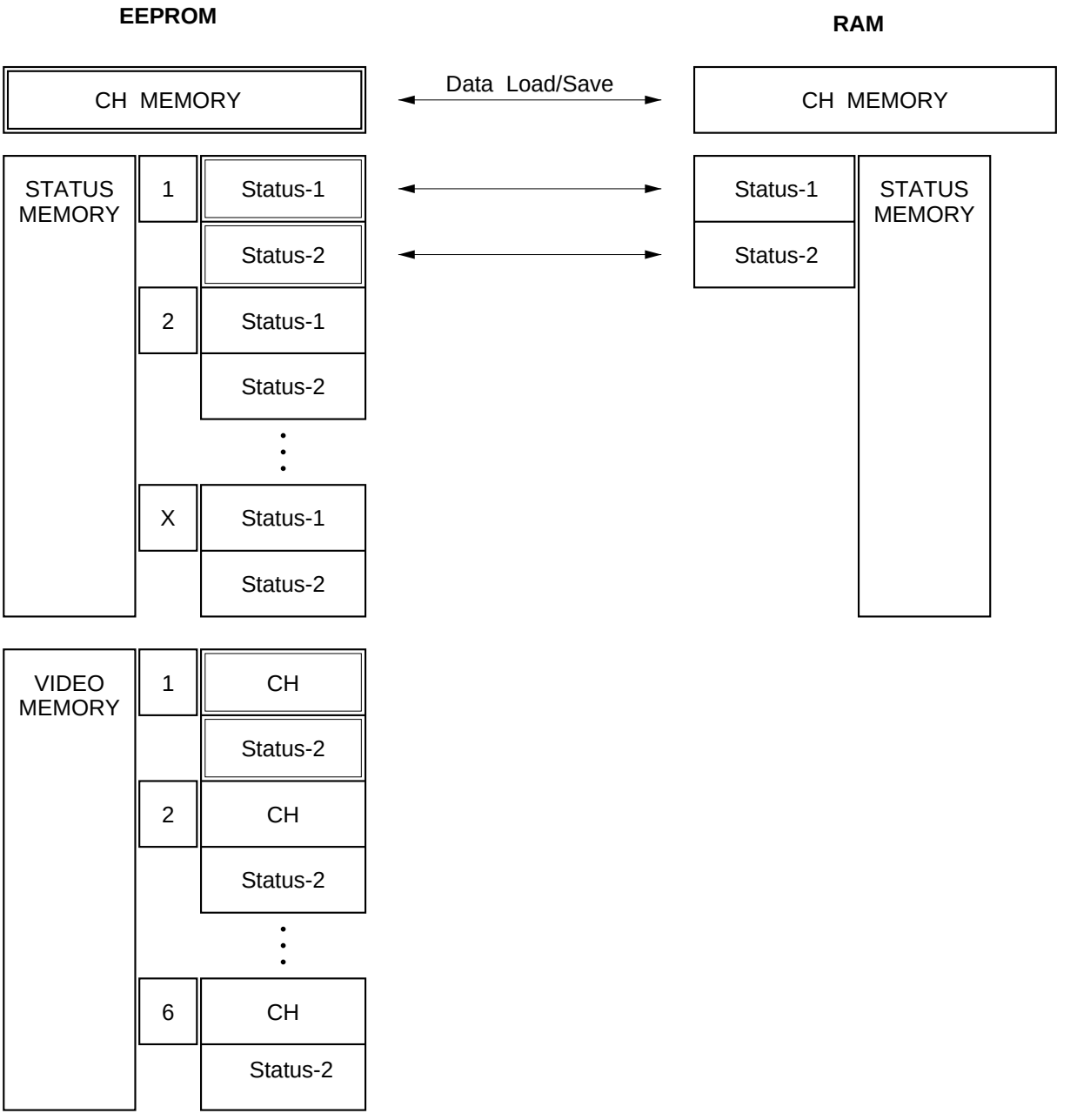
STATUS MEMORY-1
- DOT PHASE
- H SIZE
- H/V SHIFT
- VIDEO MEMORY No.

STATUS MEMORY-2
- SCAN CONVERT ON/OFF
- ASPECT Setting
- V SCROLL
- TITLE AREA

BLKG

VIDEO MEMORY
CHMEMORY+STATUS MEMORY-2

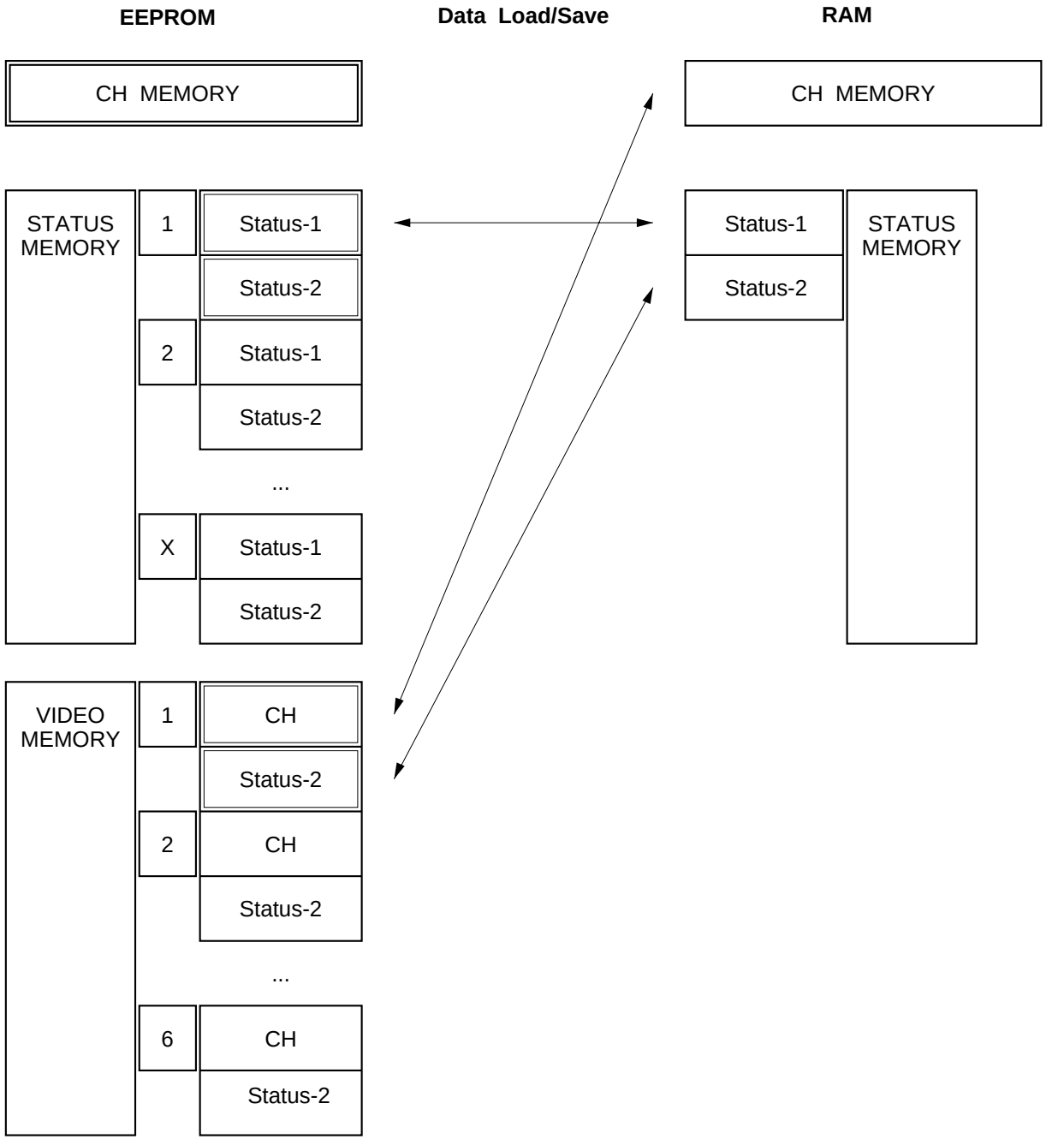
3-4-6-3. Data Access when VIDEO MEM OFF is Selected (When Status Memory No.1 is Selected)



After selection of VIDEO MEM OFF.
CH memory data is loaded into RAM from the EEPROM CH memory block.
STATUS memory data is loaded into RAM from the EEPROM STATUS memory block.

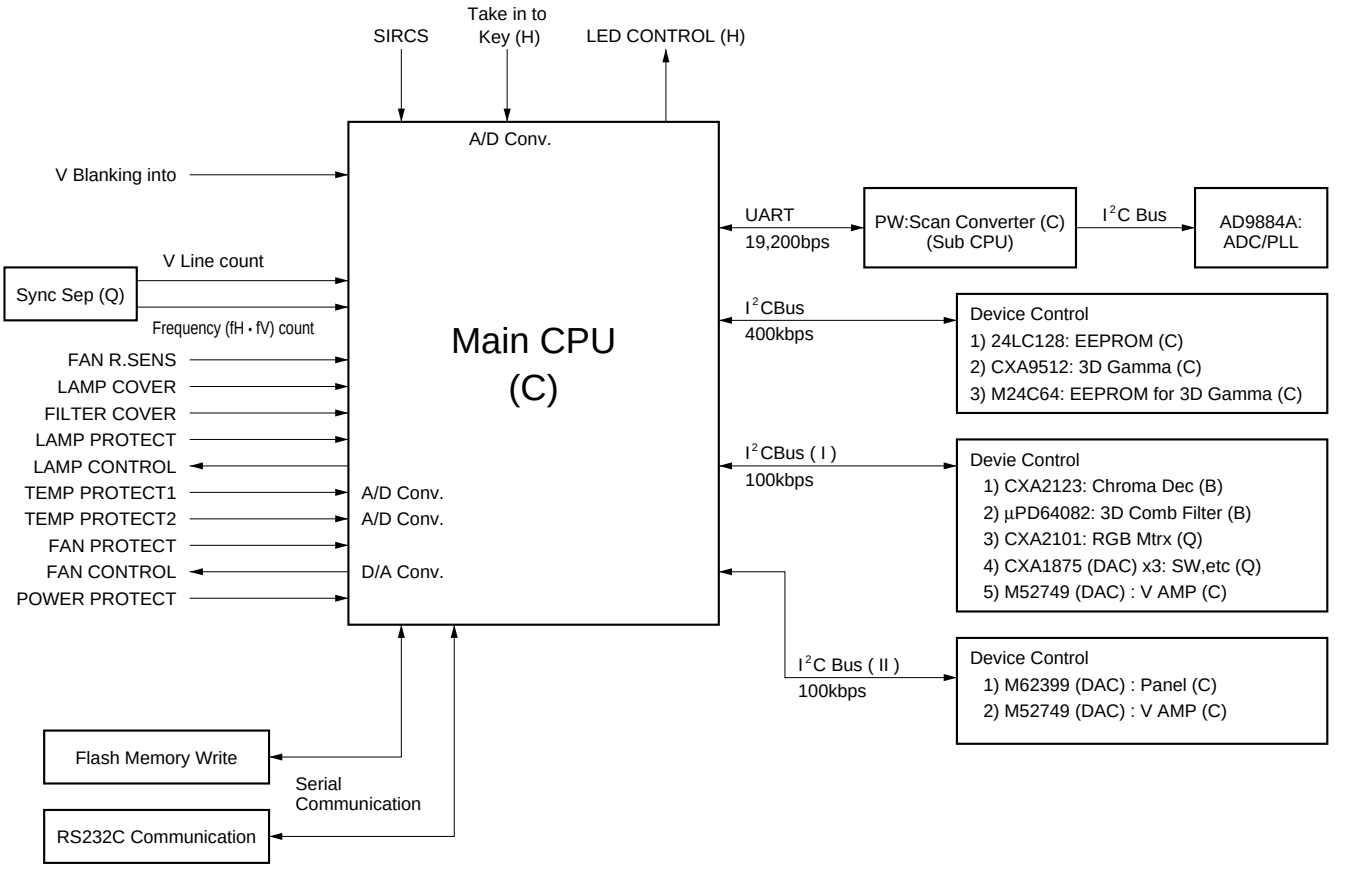
Conversely, when data is saved from RAM into EEPROM the data is saved into the blocks from which the respective type of data was loaded.

3-4-6-4. VIDEO MEM Data Access when 1 to 6 is Selected
(When Status Memory No. 1, VIDEO MEMORY No. 1 is Selected)



When VIDEO MEMORY 1 to 6 is selected.
CH memory data is loaded into RAM from the EEPROM VIDEO memory block.
The STATUS data loaded into RAM is obtained in part from the EEPROM STATUS memory block with the remainder from the VIDEO memory block.
Conversely, when data is saved from RAM into EEPROM the data is saved into the blocks from which the respective type of data is loaded.

3-4-6-5. CPU Peripheral



Adjustment Item Initialaze Data

MenuTitle	ItemName	SET MEMORY	CH MEMORY				STATUS MEMORY	
			VIDEO	S Video	INPUT-A	INPUT-B		VIDEO-HIGH
PICTURE CTRL	CONTRAST		80	80	80	80		
	BRIGHT		50	50	50	50		
	COLOR		50	50	50	50		
	HUE		50	50	50	50		
	SHARP		50	50	50	50		
	RGB ENHANCER		–	–	0	0		
	D.PICTURE		OFF	OFF	OFF	OFF		
	COLOR TEMP		LOW	LOW	LOW	LOW		
	COLOR SYS		AUTO	AUTO	AUTO	AUTO		
	DRC-MF		DRCX4	DRCX4	DRCX4	DRCX4		
INPUT SETTING	DOT PHASE						*	
	SIZE H						*	
	SHIFT						*	
	SCAN CONV						ON (*)	
	ASPECT						FULL (*)	
	V SCROLL						4	
	TITLE AREA						4	
	BLANKING						0 (*)	
	VIDEO MEMORY						OFF (*)	
SET SETTING	STATUS	ON						
	INPUT-A	COMPONENT						
	INPUT-B	COMPONENT						
	LANGUAGE	ENGLISH						
	POWER SAVING	OFF						
	SIRCS RECEIVER	FRONT&REAR						
INSTALL SETTING	KEYSTONE MEM.	ON						
	DIGIT KEYSTONE	0						
	INSTALLATION	FLOOR-FRONT						
	CINEMA BLACK	ON						
	LAMP TIMER	indication only						
INFORMATION	fH	indication only						
	fV	indication only						
	ROM Ver	indication only						
	OPERATION TIMER	indication only						
	PREVIOUS LAMP TIMER	indication only						
	TL							
	TP							
W/B ADJUST	GAIN R							193
	GAIN G							86
	GAIN B							103
	BIAS R							90
	BIAS G							109
	BIAS B							109

Adjustment Item	VIDEO MEMORY						Remark
	1	2	3	4	5	6	
CONTRAST	80	80	80	80	80	80	
BRIGHT	50	50	50	50	50	50	
COLOR	50	50	50	50	50	50	
HUE	50	50	50	50	50	50	
SHARPNESS	50	50	50	50	50	50	
D.PICTURE	OFF	OFF	OFF	OFF	OFF	OFF	
COLOR TEMP	HIGH	LOW	COSTOM1	COSTOM2	COSTOM3	COSTOM4	
COLOR SYS	AUTO	AUTO	AUTO	AUTO	AUTO	AUTO	
RGB ENHANCER	0	0	0	0	0	0	
DRC-MF	DRCX4	DRCX4	DRCX4	DRCX4	DRCX4	DRCX4	
ASPECT	FULL	FULL	FULL	FULL	FULL	FULL	
SCAN CONV	ON	ON	ON	ON	ON	ON	
V SCROLL	4	4	4	4	4	4	
TITLE AREA	4	4	4	4	4	4	
BLANKING	0	0	0	0	0	0	

MemoryName											Remark
W/B MEMORY											
VIDEO-LOW	VIDEO-CUSTOM1	VIDEO-CUSTOM2	VIDEO-CUSTOM3	VIDEO-CUSTOM4	RGB-HIGH	RGB-LOW	RGB-CUSTOM1	RGB-CUSTOM2	RGB-CUSTOM3	RGB-CUSTOM4	

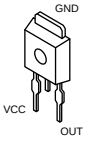
				MemoryuName				
DeviceName	ItemName	SET MEMORY	Status Memory	CHROMA MEMORY				
				NT358/NT433 /BW60	PAL/PAL-M/N/ SECAM/BW50	15kRGB	YCbCr (15k)	
RGB MTRX/	CONTRAST	16						
	SUB HUE			7	7	8	8	
	SUB BRT	55						
	R-Y/R			11	11	11	11	
	R-Y/B			15	14	14	15	
	G-Y/R			5	6	5	6	
	G-Y/B			5	5	5	5	
	YUV CON			7	7	5	6	
	YUV COL			5	5	8	10	
	SUB SHP			2	2	3	3	
	SHP F0			2	2	2	2	
	PRE OVER			1	1	1	1	
	CTI LVL			2	2	1	1	
	LTI LVL			0	0	0	0	
DCOM/	VENH	4						
DRC/	GAME		0 (Normal)					
CHROMA/	Y-OUT LVL			50	53	54	55	
	C-OUT LVL			44	50	51	50	
	Y-DL							
	S B-Y ADJ	8						
	S R-Y ADJ	8						
	S-INHBT	0						
	S-ID	0						
	S GP	0						
	S V-ID	0						
	BELL f0	0						
	BELL/HP	0						
	SHP GAIN			11	11	9	9	
	SHP EQ			1	1	1	1	
	SHP F0			2	2	2	2	
	BS POINT	3						
P.DRV/	VCOM G	59						
	VCOM R	49						
	VCOM B	54						
	SIG CEN	155						
	INV CONT	1						
	SID GRY RB	147						
	SID GRY G	147						
	SID BLK	95						
	CALIB	135						
SH/	SH1	4						
	SH2R	190						
	SH2G	190						
	SH2B	180						
VAMP/	CONT	67						
	SUB CON G E	165						
	SUB CON G O	165						
	SUB CON B E	160						
	BRT	188						
VAMP2/	CONT	67						
	SUB CON R O	170						
	SUB CON R E	170						
	SUB CON B O	160						
	BRT	188						
3D GAMMA/	SUB CONT	-20						
	SUB BRT	0						
	R OSD LVL	16						
	G OSD LVL	16						
	B OSD LVL	16						
	THROUGH	0						
	SW	1						
	APC THRES	10						
	APC LIMIT	32						
OTHER/	H START	100						
	V START	15						
	TEMP LAMP	Nonadjustable						
	TEMP PANEL	Nonadjustable						
	LAMP FAN 1	Nonadjustable						
	PANEL FAN 1	Nonadjustable						
	LAMP FAN 2	Nonadjustable						
	PANEL FAN 2	Nonadjustable						
GAMMA		Standard						

Note : There are nonadjustable items in accordance with the input signal.

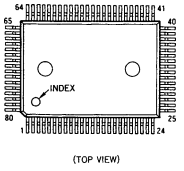
YCbCr (Except 15k)	YPbPr	HD-GBR	Remark
			Fixed Value
8	7	7	
11	12	11	Fixed Value
15	14	15	Fixed Value
6	5	5	Fixed Value
5	5	5	Fixed Value
8	8	8	
10	10	10	
2	2	2	Fixed Value
2	2	2	Fixed Value
1	0	0	Fixed Value
1	1	1	Fixed Value
0	0	0	Fixed Value
			Fixed Value
			Fixed Value
X	X	X	Fixed Value
X	X	X	Fixed Value
			refer to attached list
			Fixed Value
			Fixed Value
			Fixed Value
			Fixed Value
			Fixed Value
			Fixed Value
			Fixed Value
X	X	X	Fixed Value
X	X	X	Fixed Value
X	X	X	Fixed Value
			Fixed Value
			Fixed Value
			Fixed Value
			Fixed Value
			Fixed Value
			Fixed Value
			Fixed Value
			Fixed Value
			Fixed Value
			Fixed Value
			Fixed Value
			Fixed Value

Section 4
Semiconductors

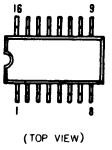
BA05FP-E2
BA09FP-E2
BA12FP-E2



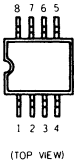
CXA2101AG



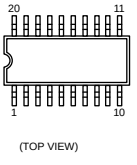
EL4332CS-TE2
MAX202CSE-T
MC74HC4538AF-T2
PC74HC123D-T
SN74HCU04ANSR
TC74VHC123F (EL)



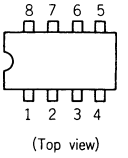
GS4981CTA
NJM2533M (TE2)
SN75157PS-ELL2000
TC7W00 (TE12R)



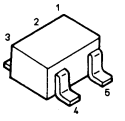
IMISM530AYB-D
M62399FP-TE2
TC74VHCT541AFT
TC74VHC244F



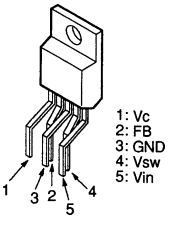
LM393PS-E20



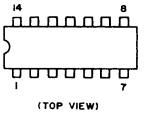
LP29851M5X
TC7S04FU
TC7S08FU



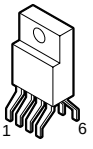
MBM29LV002T-SX1647



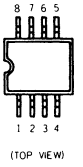
MC100ELT20DR2
TC74LCX125FT (EL)
TC74VHCT04AFT (EL)
TC74VHC02FT (EL)
TLC2932IPW-E20
TLC2933IPW-E20



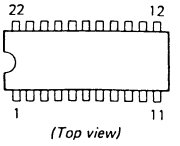
MX0341B-F



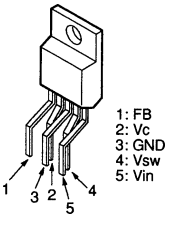
M24C64-WMN6T
ST49C101ACF8-05-TR
TC7W14F
TC7WFU
TC7WH241FU
TC7WT241FU
TC7W125FU-TE12R
TC7W14F
TL082CPS-E20
TL431BCDR2



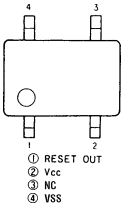
M52749FP-TP



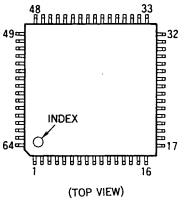
PQ20VZ1U



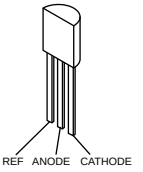
S-80828ANNP-EDR-T2
S-80842ANNP-ED6-T2



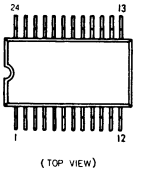
TLC5733AIPM



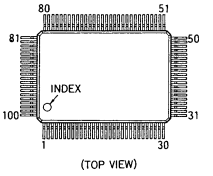
UPC1093J-1-T



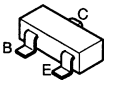
UPC659AGS-E2



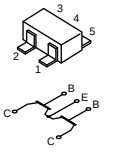
UPD64082BGF-3BA



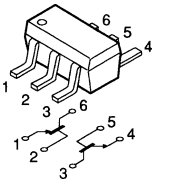
DTA144EKA-T146
DTC144EKA-T146
2SA1037AK-T146-QR
2SA1462-Y33
2SC2412K-T-146-QR
2SC2712-YG-TE85L
2SC3545-T144



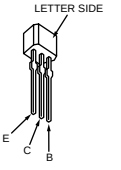
FMS1-T-148



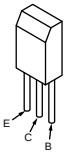
HN1B01FU-TE85R



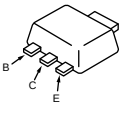
2SA1039A-QRSTA



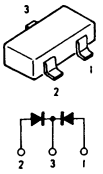
2SB734-T-2



2SB798-DL
2SB798-T1-DLDK



DAN202K-T-146



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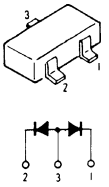
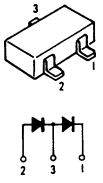
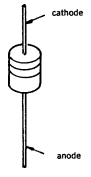


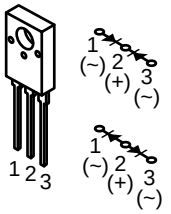
DA204K-T-146



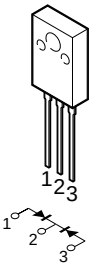
D1NS4-TA
D1NS4-TR2
RD12SB-T1
RD13ES-T1B2
1SS119-25TD



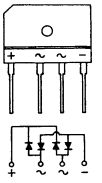
D10LC20U



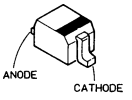
D10SC4M



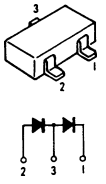
D6SB80



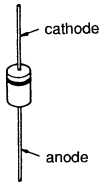
MA111
RD27SB-T1
RD5.1SB-T1
RD9.1SB2-T1
UDZ-TE-17-3.9B



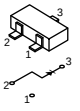
MA157-TX



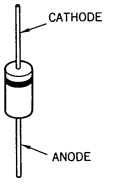
RM11C



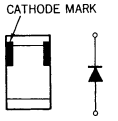
RD15M-T1B1



RD30FB1
UF4005PKG23



SEC1801C
SEC2422C



Section 5
Spare Parts

5-1. Notes on Repair Parts

1. Safety Related Components Warning

WARNING

Components marked ⚠ are critical to safe operation. Therefore, specified parts should be used in the case of replacement.

2. Standardization of Parts

Some repair parts supplied by Sony differ from those used for the unit. These are because of parts commonality and improvement.
Parts list has the present standardized repair parts.

3. Stock of Parts

Parts marked with “o” at SP (Supply Code) column of the spare parts list may not be stocked. Therefore, the delivery date will be delayed.

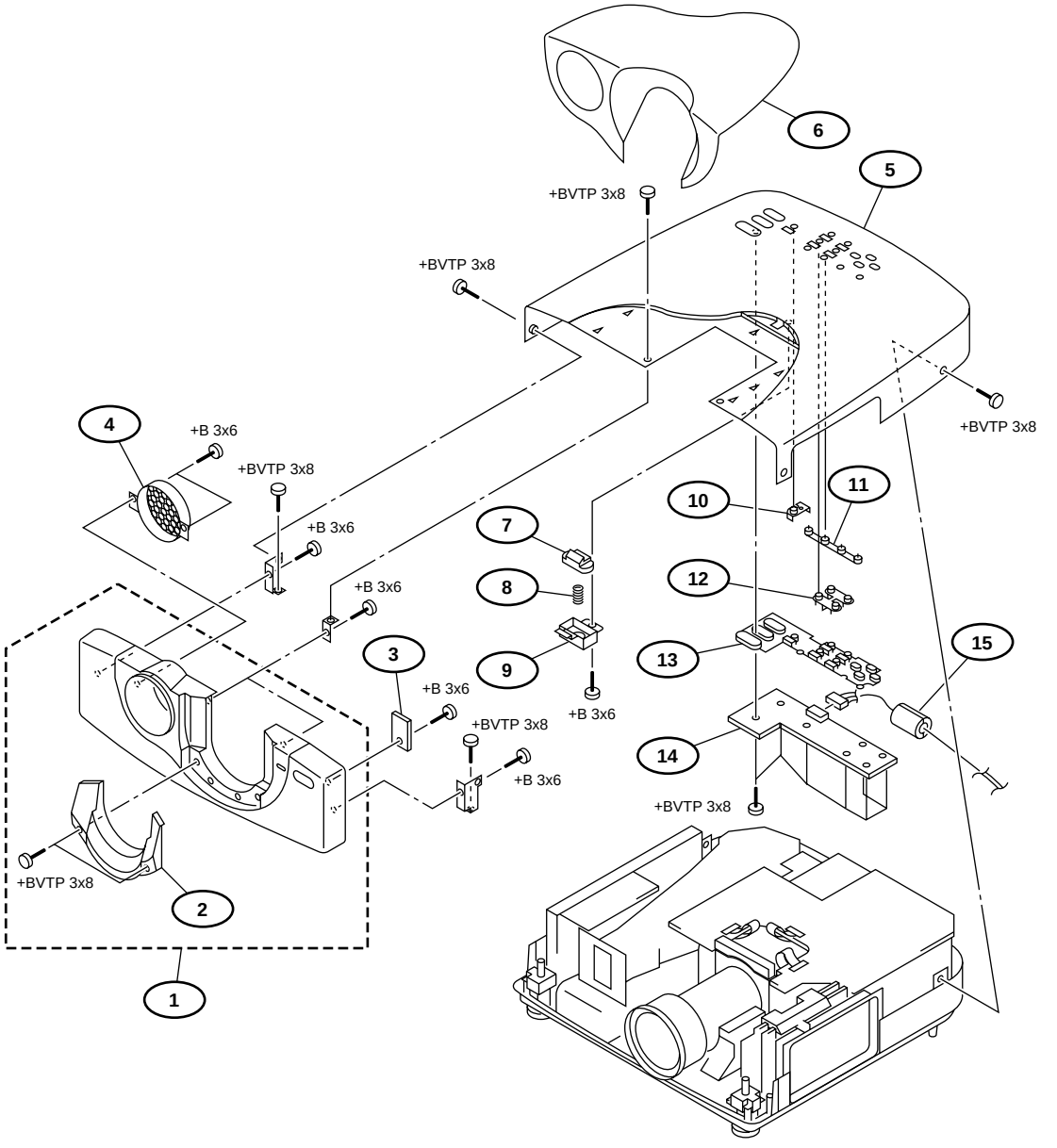
4. Units for Capacitors, Inductors and Resistors

The following units are assumed in Schematic diagrams, Electrical Parts List and Exploded Views unless otherwise specified.

Capacitors	: μF
Inductors	: μH
Resisitors	: Ω

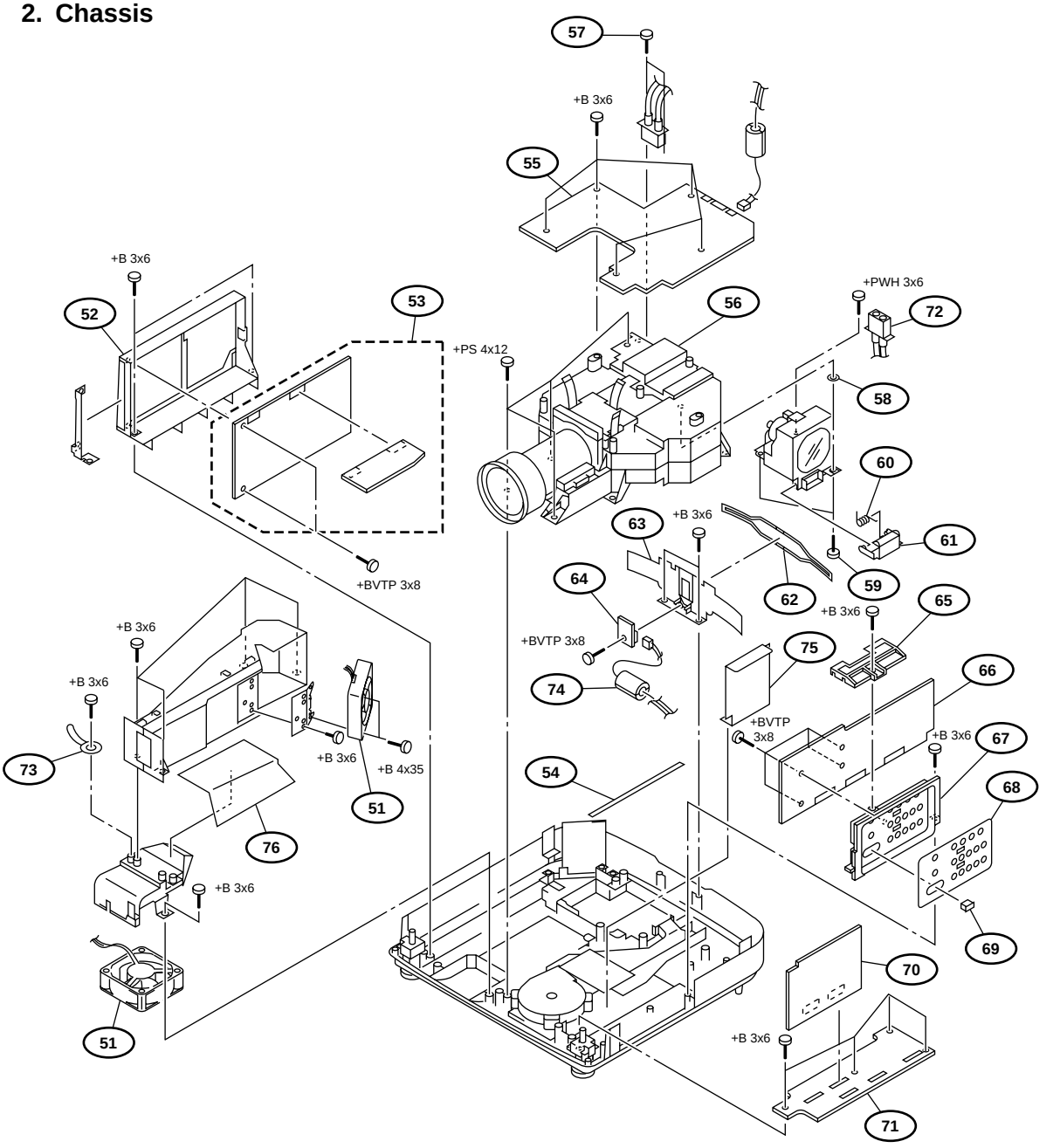
5-2. Exploded Views

1. Cabinet



No.	Part No.	SP	Description
1	X-4037-544-1	o	PANEL ASSY, FRONT
2	4-074-465-01	o	COVER (BT), LENS
3	1-675-776-11	o	PRINTED WIRING BOARD, NF
4	4-074-860-01	o	DUCT (KM)
5	4-074-461-21	o	HOOD
6	4-074-463-02	o	COVER (TP), LENS
7	4-063-672-01	s	STOPPER (LCT)
8	4-063-686-01	s	SPRING, COMPRESSION
9	4-063-673-01	s	HOLDER (LCT)
10	4-074-846-01	o	GUIDE (A), LED
11	4-074-845-01	o	GUIDE (C), LED
12	4-074-844-01	o	GUIDE (B), LED
13	4-074-876-01	o	BUTTON, CONTROL
14	A-1375-227-A	s	MOUNTED CIRCUIT BOARD, H
15	1-500-082-11	s	CLAMP, SLEEVE FERRITE
	7-682-547-04	s	SCREW +B3X6
	7-685-646-79	s	SCREW +BVTP 3X8

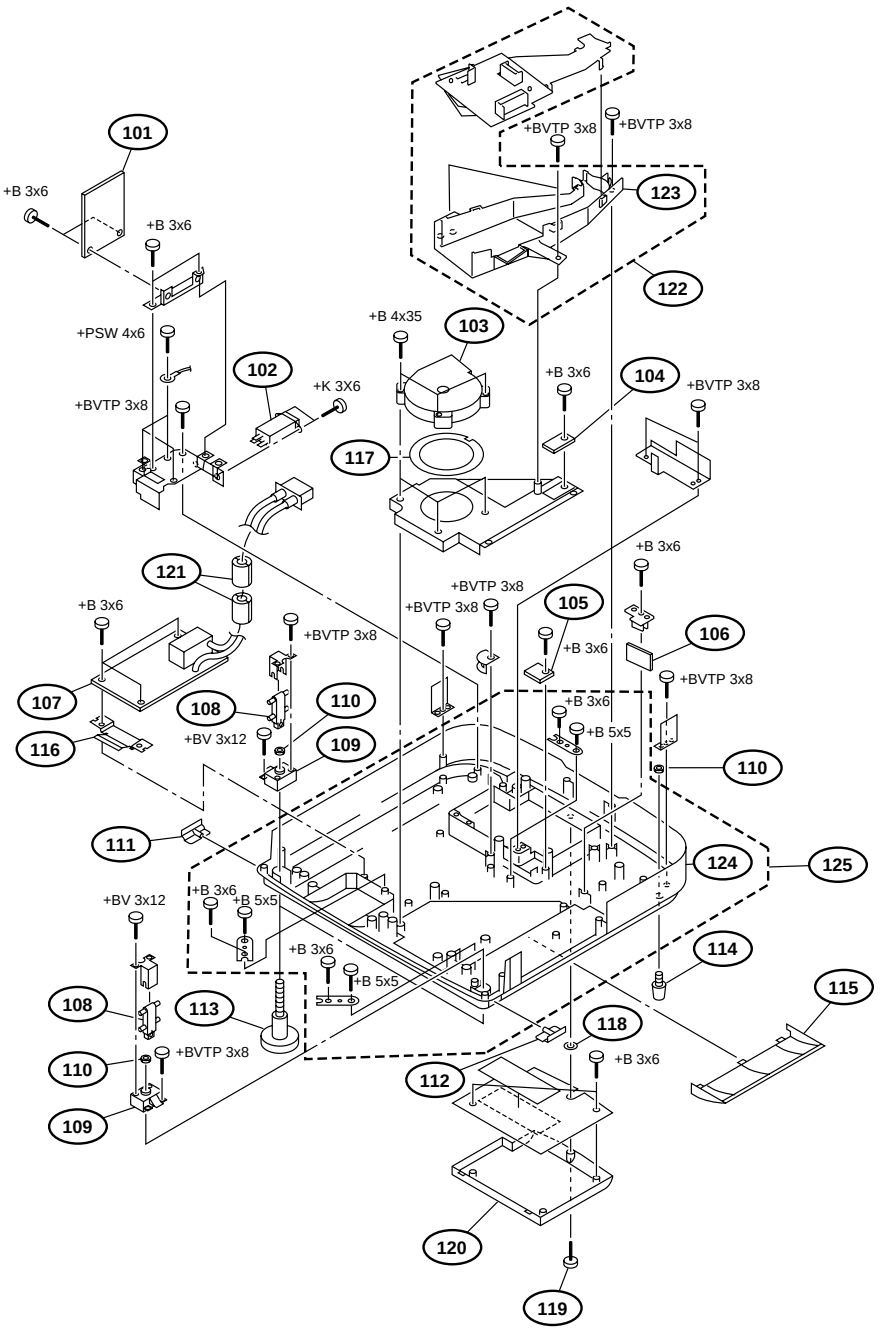
2. Chassis



No.	Part No.	SP	Description
51	1-763-874-11	s	FAN, DC
52	4-074-870-01	o	HOLDER (G)
53	A-1316-583-A	s	MOUNTED CIRCUIT BOARD, G
54	4-080-495-01	s	PACKING (DU)
55	A-1335-144-A	s	MOUNTED CIRCUIT BOARD, C
56	A-1485-446-A	s	OPTICAL UNIT
57	3-701-809-31	s	SCREW,TERMINAL(M3X8)
58	3-715-526-01	o	WASHER (M3) (PLA)
59	4-086-247-01	s	SCREW, STEP M3
60	4-073-788-01	o	SPRING, DOOR
61	4-073-787-01	o	DOOR, DUCT
62	4-074-866-02	o	WINDOW (RE), RE
63	4-074-869-01	o	HOLDER (RE)
64	1-675-771-11	o	PRINTED WIRING BOARD, NR
65	4-074-863-01	o	HOLDER (B)

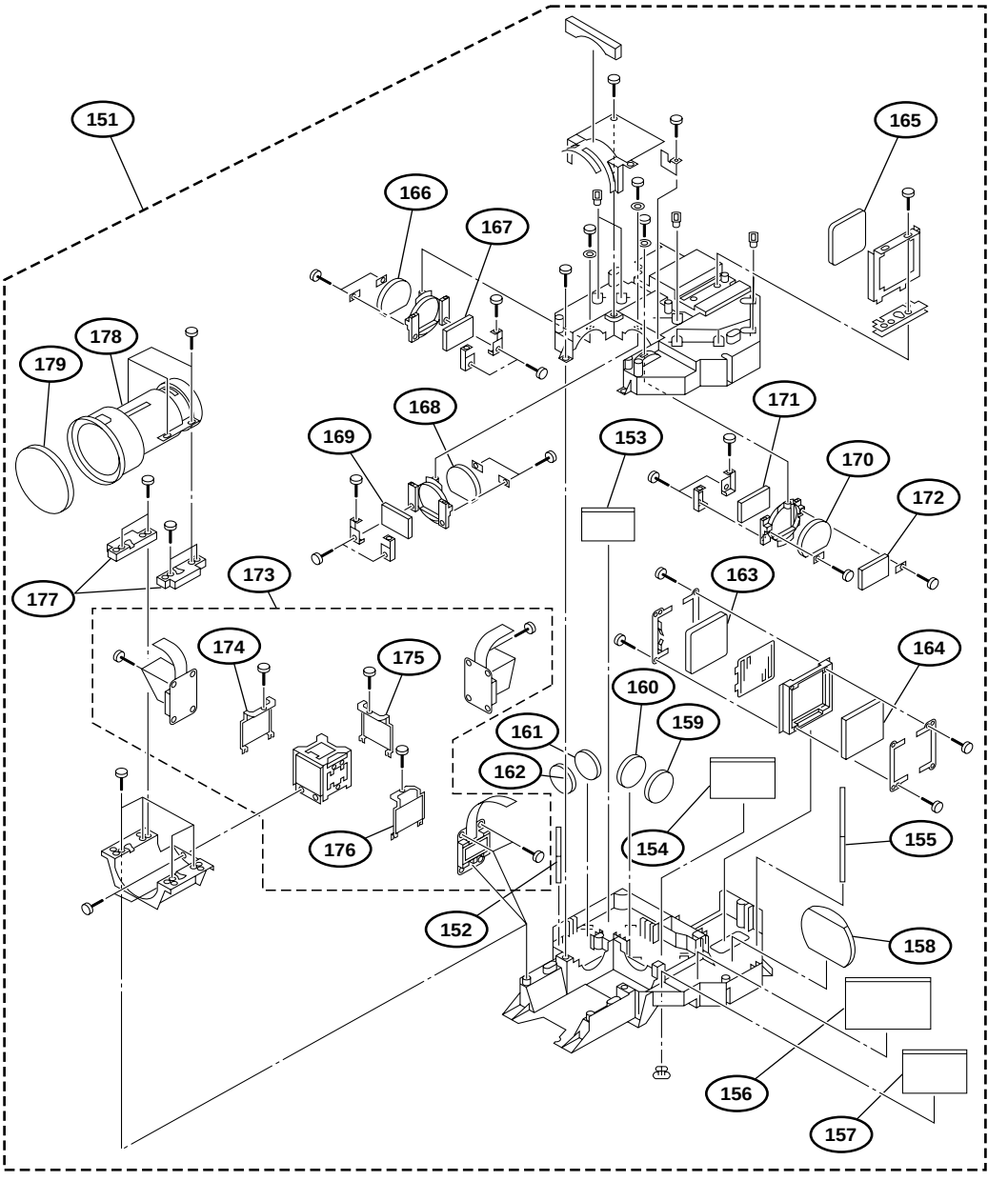
No.	Part No.	SP	Description
66	A-1300-736-A	s	MOUNTED CIRCUIT BOARD, Q
67	4-074-460-01	o	PANEL, CONNECTOR
68	4-074-865-02	o	LAVEL, CONNECTOR NAME
69	4-957-207-01	o	COVER (9P RECEPTACLE)
70	A-1136-209-A	s	MOUNTED CIRCUIT BOARD, B
71	A-1131-792-A	s	MOUNTED CIRCUIT BOARD, BM
72	1-900-222-47	s	CONNECTOR ASSY, FUSE 2P
73	3-701-822-00	s	HOLDER, WIRE
74	1-500-082-11	s	CLAMP, SLEEVE FERRITE
75	4-090-458-01	o	SHEET(B)
76	4-090-457-01	o	SHEET(G)
	7-682-547-04	s	SCREW +B3X6
	7-682-552-09	s	SCREW +B3X16
	7-682-569-09	s	SCREW +B4X35(EP-FE/ZNBK/CM2)
	7-682-903-11	s	SCREW +PWH 3X6
	7-685-646-79	s	SCREW +BVTP 3X8
	7-682-663-09	s	SCREW +PS 4X12(EP-FE/ZNBK/CM2)

3. Base



No.	Part No.	SP	Description
101	A-1241-397-A	o	MOUNTED CIRCUIT BOARD, F
102	⚠ 1-815-295-41	s	INLET, AC (WITH NOISE FILTER)
103	1-763-417-21	s	FAN, DC
104	1-675-920-11	o	PRINTED WIRING BOARD, TH
105	1-675-772-11	o	PRINTED WIRING BOARD, U
106	1-675-773-11	o	PRINTED WIRING BOARD, V
107	⚠ 1-468-445-42	s	POWER BLOCK
108	4-074-837-01	o	STAY (ADJ)
109	4-074-859-01	o	ADJUSTER UNITE
110	4-303-605-00	s	NUT
111	4-074-858-01	s	LEVER (ADJL)
112	4-074-856-01	s	LEVER (ADJ)
113	4-074-847-01	o	HOOT (FR), ADJUSTER
114	4-074-849-01	o	HOOT (RE), ADJUSTER
115	X-4039-313-2	s	BLOCK ASSY, FILTER
116	4-078-377-01	o	SHEET, INSULATING
117	4-080-494-01	s	PACKING (FN)
118	3-715-526-01	o	WASHER (M3) (PLA)
119	4-073-989-01	s	SCREW (+B M3X12), PREVENTION
120	4-074-464-01	s	LAMP COVER
121	1-543-830-11	o	CLAMP, SLEEVE FERRITE
122	X-4039-425-1	o	DUCT, ASSY
123	4-084-536-01	o	DUCT, AIR (LAMP)
124	4-074-458-08	o	BASE
125	X-4039-426-1	o	BASE, ASSY
	7-682-247-09	s	SCREW +K 3X6
	7-682-547-04	s	SCREW +B3X6
	7-682-569-09	s	SCREW +B4X35(EP-FE/ZNBK/CM2)
	7-682-960-01	s	SCREW +PSW 4X6(EP-FE/CZN-N4)
	7-685-646-79	s	SCREW +BVTP 3X8
	7-685-648-79	s	SCREW +BV3X12((EP-FE/ZNBK/CM2)

4. Optical Unit



No.	Part No.	SP	Description
151	A-1603-800-A	s	OPTICAL BLOCK(G)ASSY
152	9-885-000-35	o	MIRROR(C)
153	9-885-000-34	o	MIRROR(B)
154	9-885-027-45	o	MIRROR, G REFLECTION
155	9-885-000-33	o	MIRROR(A)
156	9-885-000-31	o	MIRROR, B LIGHT TRANSMISSION
157	9-885-000-36	o	MIRROR(D)
158	9-885-000-38	o	LENS, MAIN CONDENSER
159	9-885-000-39	o	LENS(A)RELAY
160	9-885-000-40	o	LENS(B)RELAY
161	9-885-000-41	o	LENS(C)RELAY
162	9-885-000-42	o	LENS(D)RELAY
163	9-885-027-41	o	LENS FLYEYE
164	9-885-000-27	s	CONVERTER, PS
165	9-885-000-25	s	LENS(A),FLYEYE
166	9-885-027-44	s	LENS, RCH CAPACITOR
167	9-885-027-50	s	RCH IN-POLARIZER
168	9-885-027-42	s	LENS, GCH CAPACITOR
169	9-885-027-46	s	GCH IN-POLARIZER
170	9-885-027-43	s	LENS, BCH CAPACITOR
171	9-885-027-48	s	BCH IN-POLARIZER
172	9-885-000-43	o	GLASS, UV CUT
173	A-1603-802-A	s	PRISM BLOCK(G) ASSY
174	9-885-027-51	s	RCH OUT-POLARIZER
175	9-885-027-47	s	GCH OUT-POLARIZER
176	9-885-027-49	s	BCH OUT-POLARIZER
177	9-885-000-37	s	SET,SPACER
178	9-885-027-40	s	LENS, PROTECTION
179	4-074-403-01	s	CAP, LENS

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5-3. Electrical Parts List for Boards

H BOARD

Ref. No. or Q'ty	Part No.	SP	Description	
1pc	A-1375-227-A	s	MOUNTED CIRCUIT BOARD, H	
C7001	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V	
C7002	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V	
CN7001	1-764-007-11	o	PIN, CONNECTOR (SMD) 12P	
D7001	8-719-080-04	s	DIODE CL-190UB-X-T	
D7002	8-719-080-04	s	DIODE CL-190UB-X-T	
D7003	8-719-080-04	s	DIODE CL-190UB-X-T	
D7004	8-719-045-61	s	DIODE SEC1901C	
D7005	8-719-080-04	s	DIODE CL-190UB-X-T	
D7006	8-719-045-61	s	DIODE SEC1901C	
D7007	8-719-080-04	s	DIODE CL-190UB-X-T	
D7008	8-719-080-04	s	DIODE CL-190UB-X-T	
D7009	8-719-045-53	s	DIODE SEC1801C	
D7010	8-719-080-04	s	DIODE CL-190UB-X-T	
D7011	8-719-045-60	s	DIODE SEC1401C	
D7012	8-719-080-04	s	DIODE CL-190UB-X-T	
D7013	8-719-080-04	s	DIODE CL-190UB-X-T	
D7014	8-719-080-04	s	DIODE CL-190UB-X-T	
D7015	8-719-045-51	s	DIODE SEC2422C	
D7016	8-719-914-43	s	DIODE DAN202K	
D7017	8-719-914-44	s	DIODE DAP202K	(DUAL)
D7018	8-719-914-43	s	DIODE DAN202K	
D7019	8-719-914-44	s	DIODE DAP202K	(DUAL)
D7020	8-719-914-43	s	DIODE DAN202K	
D7021	8-719-914-44	s	DIODE DAP202K	(DUAL)
D7022	8-719-080-04	s	DIODE CL-190UB-X-T	
D7023	8-719-914-43	s	DIODE DAN202K	
D7024	8-719-914-44	s	DIODE DAP202K	(DUAL)
D7025	8-719-080-04	s	DIODE CL-190UB-X-T	
D7026	8-719-080-04	s	DIODE CL-190UB-X-T	
D7027	8-719-080-04	s	DIODE CL-190UB-X-T	
D7028	8-719-080-04	s	DIODE CL-190UB-X-T	
D7029	8-719-080-04	s	DIODE CL-190UB-X-T	
D7030	8-719-080-04	s	DIODE CL-190UB-X-T	
D7031	8-719-080-04	s	DIODE CL-190UB-X-T	
D7032	8-719-080-04	s	DIODE CL-190UB-X-T	
D7033	8-719-080-04	s	DIODE CL-190UB-X-T	
D7034	8-719-080-04	s	DIODE CL-190UB-X-T	
FB7001	1-414-235-22	s	INDUCTOR, FERRITE BEAD	
FB7002	1-414-235-22	s	INDUCTOR, FERRITE BEAD	
Q7001	8-729-230-49	s	TRANSISTOR 2SC2712-YG	
Q7002	8-729-230-49	s	TRANSISTOR 2SC2712-YG	
Q7003	8-729-230-49	s	TRANSISTOR 2SC2712-YG	
Q7004	8-729-027-38	s	TRANSISTOR DTA144EKA-T146	
Q7005	8-729-230-49	s	TRANSISTOR 2SC2712-YG	
Q7006	8-729-230-49	s	TRANSISTOR 2SC2712-YG	
Q7007	8-729-230-49	s	TRANSISTOR 2SC2712-YG	
R7001	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)	
R7002	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)	
R7003	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)	
R7004	1-216-075-00	s	RESISTOR CHIP 12K 1/10W(2012)	
R7005	1-216-069-00	s	RESISTOR,CHIP 6.8K 1/10W(2012)	
R7006	1-216-063-91	s	RESISTOR,CHIP 3.9K 1/10W(2125)	
R7007	1-216-059-00	s	RESISTOR,CHIP 2.7K 1/10W(2012)	
R7008	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)	
R7009	1-216-053-00	s	RESISTOR CHIP 1.5K 1/10W(2012)	

(H BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R7010	1-216-055-00	s	RESISTOR CHIP 1.8K 1/10W(2012)
R7011	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R7012	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7013	1-216-061-00	s	RESISTOR CHIP 3.3K 1/10W(2012)
R7014	1-216-083-00	s	RESISTOR CHIP 27K 1/10W(2012)
R7015	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7016	1-216-069-00	s	RESISTOR,CHIP 6.8K 1/10W(2012)
R7017	1-216-075-00	s	RESISTOR CHIP 12K 1/10W(2012)
R7018	1-216-063-91	s	RESISTOR,CHIP 3.9K 1/10W(2125)
R7019	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7020	1-216-061-00	s	RESISTOR CHIP 3.3K 1/10W(2012)
R7021	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7022	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7023	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7024	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7025	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7026	1-216-061-00	s	RESISTOR CHIP 3.3K 1/10W(2012)
R7027	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7028	1-216-055-00	s	RESISTOR CHIP 1.8K 1/10W(2012)
R7029	1-216-053-00	s	RESISTOR CHIP 1.5K 1/10W(2012)
R7030	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R7031	1-216-059-00	s	RESISTOR,CHIP 2.7K 1/10W(2012)
R7032	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R7033	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R7034	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7035	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7036	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7038	1-216-061-00	s	RESISTOR CHIP 3.3K 1/10W(2012)
R7039	1-216-061-00	s	RESISTOR CHIP 3.3K 1/10W(2012)
R7040	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7041	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7042	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7043	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7044	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7045	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7046	1-216-061-00	s	RESISTOR CHIP 3.3K 1/10W(2012)
R7047	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R7048	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
S7001	1-771-105-11	s	SWITCH, TACTILE
S7002	1-771-105-11	s	SWITCH, TACTILE
S7003	1-771-105-11	s	SWITCH, TACTILE
S7004	1-771-105-11	s	SWITCH, TACTILE
S7005	1-771-105-11	s	SWITCH, TACTILE
S7006	1-771-105-11	s	SWITCH, TACTILE
S7007	1-771-105-11	s	SWITCH, TACTILE
S7008	1-771-105-11	s	SWITCH, TACTILE
S7009	1-771-105-11	s	SWITCH, TACTILE
S7010	1-771-105-11	s	SWITCH, TACTILE
S7011	1-771-105-11	s	SWITCH, TACTILE
S7012	1-771-105-11	s	SWITCH, TACTILE

GA BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-675-779-11		PRINTED WIRING BOARD, GA
C2602	1-136-209-11	s	CAPACITOR,FILM 0.1MF/630V
C2604	1-164-644-11	s	CAPACITOR,CERAMIC 330PF/500VDC
C2605	1-164-644-11	s	CAPACITOR,CERAMIC 330PF/500VDC
C2606	1-107-911-11	s	CAPACITOR,ELECT 220MF/50V
C2607	1-136-167-00	s	CAPACITOR,FILM 0.15MF/50V
C2608	1-136-162-00	s	CAPACITOR,FILM 0.056MF/50V
C2609	1-136-167-00	s	CAPACITOR,FILM 0.15MF/50V
C2610	1-136-162-00	s	CAPACITOR,FILM 0.056MF/50V
C2611	1-117-827-11	s	CAP, METALIZED PP FILM 3000PF
C2613	1-107-879-11	s	CAPACITOR,ELECT 3300MF/10V
C2614	1-107-905-11	s	CAPACITOR,ELECT 4.7MF/50V
C2615	1-107-909-11	s	CAPACITOR,ELECT 47MF/50V
C2616	1-110-501-11	s	CAPACITOR CERAMIC 0.33MF/16V
C2617	1-115-339-11	s	CAPACITOR,CERAMIC 0.1MF/50V
C2619	1-109-994-11	s	CAPACITOR,CHIP CERAMIC 2.2MF B
CN2011	1-785-517-11	o	CONNECTOR, BOARD TO BOARD
CN2012	1-774-245-11	o	CONNECTOR, BOARD TO BOARD 8P
D2601	8-719-510-39	s	DIODE D10LC20U
D2602	8-719-510-12	s	DIODE D10SC4M
D2603	8-719-073-01	s	DIODE MA111-(K8).S0
D2605	8-719-160-83	s	DIODE RD30FB1
IC2602	8-759-198-31	s	IC UPC1093J-1-T
IC2603	8-759-388-23	s	IC TL431BCDR2
L2601	1-406-659-11	s	COIL CHOKE 10UH
Q2601	8-729-041-18	s	TRANSISTOR MXO341B-F
Q2602	8-729-216-22	s	TRANSISTOR 2SA1162-G
Q2603	8-729-216-22	s	TRANSISTOR 2SA1162-G
Q2604	8-729-216-22	s	TRANSISTOR 2SA1162-G
Q2605	8-729-230-49	s	TRANSISTOR 2SC2712-YG
R2604	1-260-288-11	s	RESISTOR,CARBON 0.47 1/2W
R2605	1-260-288-11	s	RESISTOR,CARBON 0.47 1/2W
R2608	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R2609	1-247-887-00	s	RESISTOR,CARBON 220K 1/4W
R2610	1-247-887-00	s	RESISTOR,CARBON 220K 1/4W
R2611	1-247-887-00	s	RESISTOR,CARBON 220K 1/4W
R2612	1-247-887-00	s	RESISTOR,CARBON 220K 1/4W
R2613	1-249-381-11	s	RES,CARBON 1 (1/4W)
R2614	1-249-381-11	s	RES,CARBON 1 (1/4W)
R2615	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R2616	1-216-659-11	s	RESISTOR,CHIP 2.2K 1/10W(2012)
R2617	1-216-658-11	s	RESISTOR,CHIP 2.0K 1/10W(2012)
R2618	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R2620	1-215-909-11	s	RESISTOR,METAL FILM 47/3W
R2621	1-215-909-11	s	RESISTOR,METAL FILM 47/3W
R2623	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R2624	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R2625	1-216-081-00	s	RESISTOR,CHIP 22K 1/10W(2012)
R2626	1-216-663-11	s	RESISTOR,CHIP 3.3K 1/10W(2012)
R2627	1-216-669-11	s	RESISTOR,CHIP 5.6K 1/10W(2012)
R2628	1-216-097-00	s	RESISTOR CHIP 100K 1/10W(2012)
R2629	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R2630	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R2631	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
T2601	1-429-987-11	s	TRANSFORMER, POWER INSULATED
T2602	1-429-992-11	s	TRANSFORMER, POWER REGULATION

C BOARD

Note :
*1 If IC5202 becomes defective, replace the entire C board.
*2 If IC5305 becomes defective, replace the entire C board.

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-1300-714-A	s	MOUNTED CIRCUIT BOARD, C
C5001	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5002	1-109-982-11	s	CAPACITOR,CHIP CERAMIC 1MF/10V
C5003	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5004	1-109-982-11	s	CAPACITOR,CHIP CERAMIC 1MF/10V
C5005	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5006	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5007	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5008	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5009	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5010	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5011	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5012	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5013	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5014	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5015	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5016	1-124-778-00	s	CAPACITOR,ELECT 22MF/6.3V
C5017	1-124-778-00	s	CAPACITOR,ELECT 22MF/6.3V
C5018	1-124-778-00	s	CAPACITOR,ELECT 22MF/6.3V
C5019	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5020	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5021	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5022	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5023	1-162-915-11	s	CAPACITOR,CERAMIC 10PF/50V CH
C5024	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5025	1-162-915-11	s	CAPACITOR,CERAMIC 10PF/50V CH
C5026	1-164-315-11	s	CAPACITOR,CERAMIC 470PF/50V CH
C5027	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5028	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5029	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5030	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5031	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5032	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5034	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5035	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5036	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5037	1-127-692-11	s	CAP, CHIP CERAMIC 10MF B 3216
C5038	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5039	1-128-394-11	s	CAPACITOR,ELECT 220MF/10V
C5040	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5041	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5101	1-128-401-11	s	CAPACITOR,ELECT100MF/25V(CHIP)
C5102	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C5103	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C5104	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C5105	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C5109	1-110-648-11	s	CAPACITOR,CAPACITOR 220MF/25V
C5111	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C5112	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C5113	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C5114	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C5115	1-128-394-11	s	CAPACITOR,ELECT 220MF/10V
C5116	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5117	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5118	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5119	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF

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Ref. No. or Q'ty	Part No.	SP	Description
C5120	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5121	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C5122	1-128-401-11	s	CAPACITOR,ELECT100MF/25V(CHIP)
C5123	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5124	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5125	1-128-394-11	s	CAPACITOR,ELECT 220MF/10V
C5126	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5127	1-110-563-11	s	CAPACITOR CERAMIC 0.068MF/16V
C5128	1-110-563-11	s	CAPACITOR CERAMIC 0.068MF/16V
C5129	1-110-563-11	s	CAPACITOR CERAMIC 0.068MF/16V
C5130	1-128-394-11	s	CAPACITOR,ELECT 220MF/10V
C5131	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5132	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5133	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5134	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5135	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5136	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5137	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5138	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5139	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5140	1-124-778-00	s	CAPACITOR,ELECT 22MF/6.3V
C5141	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5142	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5143	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5144	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5145	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5146	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5147	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5148	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5149	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5150	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5151	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5152	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5153	1-128-394-11	s	CAPACITOR,ELECT 220MF/10V
C5154	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5155	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5156	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5160	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5161	1-165-176-11	s	CAPACITOR,CERAMIC 47000PF/16V
C5162	1-164-505-11	s	CAPACITOR,CHIP CERAMIC 2.2MF
C5163	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5164	1-119-667-11	s	CAPACITOR CERAMIC 22MF/10V(F)
C5165	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5166	1-128-401-11	s	CAPACITOR,ELECT100MF/25V(CHIP)
C5167	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5168	1-110-648-11	s	CAPACITOR,CAPACITOR 220MF/25V
C5201	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5202	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5203	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5207	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5208	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5209	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5210	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5211	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5212	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5213	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5214	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5215	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5216	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF

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Ref. No. or Q'ty	Part No.	SP	Description
C5217	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5218	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5219	1-126-246-11	s	CAPACITOR ERECT 220MF/4V(CHIP)
C5220	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5221	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5222	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5223	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5224	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5225	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5227	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5228	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5229	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5230	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5231	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5232	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5233	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5234	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5235	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5236	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5237	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5238	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5239	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5240	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5241	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5242	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5243	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5244	1-128-394-11	s	CAPACITOR,ELECT 220MF/10V
C5245	1-109-982-11	s	CAPACITOR,CHIP CERAMIC 1MF/10V
C5250	1-126-246-11	s	CAPACITOR ERECT 220MF/4V(CHIP)
C5251	1-128-394-11	s	CAPACITOR,ELECT 220MF/10V
C5252	1-125-891-11	s	CAPACITOR CERAMIC 0.47MF/10V
C5253	1-115-416-11	s	CAPACITOR,CERAMIC 1000PF/25V
C5254	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF//25V
C5255	1-125-891-11	s	CAPACITOR CERAMIC 0.47MF/10V
C5259	1-125-891-11	s	CAPACITOR CERAMIC 0.47MF/10V
C5260	1-125-891-11	s	CAPACITOR CERAMIC 0.47MF/10V
C5261	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5262	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5301	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5302	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5303	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5304	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5305	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5306	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5307	1-128-394-11	s	CAPACITOR,ELECT 220MF/10V
C5308	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5309	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5310	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5311	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5312	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5313	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5314	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5315	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5316	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5317	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5318	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5319	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5320	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5321	1-124-778-00	s	CAPACITOR,ELECT 22MF/6.3V

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Ref. No. or Q'ty	Part No.	SP	Description
C5322	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5323	1-124-778-00	s	CAPACITOR,ELECT 22MF/6.3V
C5324	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5325	1-109-982-11	s	CAPACITOR,CHIP CERAMIC 1MF/10V
C5326	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5328	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C5330	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C5331	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5332	1-128-394-11	s	CAPACITOR,ELECT 220MF/10V
C5333	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5334	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5335	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C5402	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5403	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5406	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C5407	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5408	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5409	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5410	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5411	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5412	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5413	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5414	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5415	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5416	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5417	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5418	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5419	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5420	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5421	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5422	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5507	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5508	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5509	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5510	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5516	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5517	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5522	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5523	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5525	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5526	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5528	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5529	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5534	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C5535	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C5537	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5538	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5539	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5540	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5541	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5542	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5543	1-135-347-11	s	CAP, SOLID ELECT 82MF
C5544	1-135-347-11	s	CAP, SOLID ELECT 82MF
C5545	1-126-602-11	s	CAPACITOR,ELECT 3.3MF/50V(CHIP
C5546	1-126-602-11	s	CAPACITOR,ELECT 3.3MF/50V(CHIP
C5547	1-126-602-11	s	CAPACITOR,ELECT 3.3MF/50V(CHIP
C5548	1-126-602-11	s	CAPACITOR,ELECT 3.3MF/50V(CHIP
C5549	1-126-602-11	s	CAPACITOR,ELECT 3.3MF/50V(CHIP
C5550	1-126-602-11	s	CAPACITOR,ELECT 3.3MF/50V(CHIP

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Ref. No. or Q'ty	Part No.	SP	Description
C5551	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C5552	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C5553	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C5554	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C5555	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C5556	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C5563	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5567	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5579	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5580	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5581	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C5582	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C5583	1-164-299-11	s	CAPACITOR,CHIP CERAMIC 0.22MF
C5584	1-164-299-11	s	CAPACITOR,CHIP CERAMIC 0.22MF
C5585	1-164-299-11	s	CAPACITOR,CHIP CERAMIC 0.22MF
C5586	1-164-299-11	s	CAPACITOR,CHIP CERAMIC 0.22MF
C5587	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5588	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5589	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5590	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5591	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5592	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5593	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5601	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C5602	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5603	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5604	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5605	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C5606	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5607	1-162-923-11	s	CAPACITOR,CERAMIC 47PF/50V CH
C5608	1-162-923-11	s	CAPACITOR,CERAMIC 47PF/50V CH
C5609	1-164-156-11	s	CAPACITOR,CERAMIC 0.1MF/25V F
C5610	1-164-156-11	s	CAPACITOR,CERAMIC 0.1MF/25V F
C5612	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5613	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5614	1-128-400-11	s	CAPACITOR, ELECT 47MF/25V
C5615	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5616	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5617	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5618	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5619	1-128-400-11	s	CAPACITOR, ELECT 47MF/25V
C5620	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5621	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5622	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C5624	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5625	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5626	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5627	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5628	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5629	1-164-156-11	s	CAPACITOR,CERAMIC 0.1MF/25V F
C5630	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5631	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5632	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5633	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5636	1-128-401-11	s	CAPACITOR,ELECT100MF/25V(CHIP)
C5637	1-128-401-11	s	CAPACITOR,ELECT100MF/25V(CHIP)
C5638	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5639	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5640	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF

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Ref. No. or Q'ty	Part No.	SP	Description
C5641	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5690	1-128-401-11	s	CAPACITOR,ELECT100MF/25V(CHIP)
C5701	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C5702	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5703	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5704	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5705	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C5706	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5707	1-162-923-11	s	CAPACITOR,CERAMIC 47PF/50V CH
C5708	1-162-923-11	s	CAPACITOR,CERAMIC 47PF/50V CH
C5709	1-164-156-11	s	CAPACITOR,CERAMIC 0.1MF/25V F
C5710	1-164-156-11	s	CAPACITOR,CERAMIC 0.1MF/25V F
C5712	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5713	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5714	1-128-400-11	s	CAPACITOR, ELECT 47MF/25V
C5715	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5716	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5717	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5718	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5719	1-128-400-11	s	CAPACITOR, ELECT 47MF/25V
C5720	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5721	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5722	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C5724	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5725	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5726	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5727	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5728	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5729	1-164-156-11	s	CAPACITOR,CERAMIC 0.1MF/25V F
C5730	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5731	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5732	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5733	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5736	1-128-401-11	s	CAPACITOR,ELECT100MF/25V(CHIP)
C5737	1-128-401-11	s	CAPACITOR,ELECT100MF/25V(CHIP)
C5738	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5739	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5740	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5741	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5790	1-128-401-11	s	CAPACITOR,ELECT100MF/25V(CHIP)
C5801	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C5802	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5803	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5804	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5805	1-126-206-11	s	CAPACITOR, ELECT 100MF/6.3V
C5806	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5807	1-162-923-11	s	CAPACITOR,CERAMIC 47PF/50V CH
C5808	1-162-923-11	s	CAPACITOR,CERAMIC 47PF/50V CH
C5809	1-164-156-11	s	CAPACITOR,CERAMIC 0.1MF/25V F
C5810	1-164-156-11	s	CAPACITOR,CERAMIC 0.1MF/25V F
C5812	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5813	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5814	1-128-400-11	s	CAPACITOR, ELECT 47MF/25V
C5815	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5816	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5817	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5818	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5819	1-128-400-11	s	CAPACITOR, ELECT 47MF/25V
C5820	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B

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Ref. No. or Q'ty	Part No.	SP	Description
C5821	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5822	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C5824	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5825	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5826	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5827	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5828	1-162-970-11	s	CAPACITOR CERAMIC 0.01MF/25V B
C5829	1-164-156-11	s	CAPACITOR,CERAMIC 0.1MF/25V F
C5830	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5831	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5832	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5833	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5836	1-128-401-11	s	CAPACITOR,ELECT100MF/25V(CHIP)
C5837	1-128-401-11	s	CAPACITOR,ELECT100MF/25V(CHIP)
C5838	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5839	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5840	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5841	1-107-826-11	s	CAPACITOR,CHIP CERAMIC 0.1MF
C5890	1-128-401-11	s	CAPACITOR,ELECT100MF/25V(CHIP)
C6511	1-164-315-11	s	CAPACITOR,CERAMIC 470PF/50V CH
C6512	1-164-315-11	s	CAPACITOR,CERAMIC 470PF/50V CH
C6513	1-164-315-11	s	CAPACITOR,CERAMIC 470PF/50V CH
CN5001	1-785-306-21	o	CONNECTOR, BOARD TO BOARD
CN5002	1-691-591-11	o	PIN,CONNECTOR (8P)(SMD)(1.5MM)
CN5003	1-793-798-21	o	CONNECTOR, BOARD TO BOARD
CN5004	1-580-057-11	o	PIN,CONNECTOR 4P
CN5005	1-580-055-21	o	PIN, CONNECTOR 2P
CN5006	1-580-055-21	s	PIN, CONNECTOR 2P
CN5007	1-580-056-21	o	PIN,CONNECTOR 3P
CN5008	1-580-056-21	o	PIN,CONNECTOR 3P
CN5009	1-764-007-11	o	PIN, CONNECTOR (SMD) 12P
CN5010	1-580-057-11	o	PIN,CONNECTOR 4P
CN5011	1-580-055-21	o	PIN, CONNECTOR 2P
CN5201	1-785-306-21	o	CONNECTOR, BOARD TO BOARD
CN5203	1-764-177-11	o	PIN,CONNECTOR (7P)(SMD)(1.5MM)
CN5301	1-573-290-21	s	PIN,CONNECTOR (4P)(SMD)(1.5MM)
CN5601	1-793-812-21	s	CONNECTOR, FFC/FPC
CN5701	1-793-812-21	s	CONNECTOR, FFC/FPC
CN5801	1-793-812-21	s	CONNECTOR, FFC/FPC
D5001	8-719-914-43	s	DIODE DAN202K
D5002	8-719-914-43	s	DIODE DAN202K
D5003	8-719-159-10	s	DIODE RD5.1SB-T2
D5004	8-719-159-10	s	DIODE RD5.1SB-T2
D5005	8-719-159-10	s	DIODE RD5.1SB-T2
D5006	8-719-159-10	s	DIODE RD5.1SB-T2
D5007	8-719-159-10	s	DIODE RD5.1SB-T2
D5008	8-719-159-10	s	DIODE RD5.1SB-T2
D5009	8-719-159-10	s	DIODE RD5.1SB-T2
D5010	8-719-159-10	s	DIODE RD5.1SB-T2
D5011	8-719-159-10	s	DIODE RD5.1SB-T2
D5012	8-719-159-10	s	DIODE RD5.1SB-T2
D5013	8-719-159-10	s	DIODE RD5.1SB-T2
D5014	8-719-159-10	s	DIODE RD5.1SB-T2
D5015	8-719-159-10	s	DIODE RD5.1SB-T2
D5016	8-719-159-10	s	DIODE RD5.1SB-T2
D5017	8-719-159-10	s	DIODE RD5.1SB-T2
D5018	8-719-914-43	s	DIODE DAN202K
D5202	8-719-914-43	s	DIODE DAN202K

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Ref. No. or Q'ty	Part No.	SP	Description
D5301	8-719-914-43	s	DIODE DAN202K
FB5001	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5002	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5003	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5004	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5005	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5006	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5007	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5008	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5009	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5010	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5011	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5012	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5071	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5209	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5210	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5211	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5212	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5261	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5262	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5301	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5302	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FB5338	1-414-921-11	s	INDUCTOR, FERRITE BEAD
FL5010	1-239-899-21	s	FILTER, CHIP EMI
FL5020	1-239-899-21	s	FILTER, CHIP EMI
FL5030	1-239-899-21	s	FILTER, CHIP EMI
FL5101	1-234-011-11	s	FILTER, EMI
FL5102	1-234-011-11	s	FILTER, EMI
FL5103	1-234-011-11	s	FILTER, EMI
FL5601	1-234-011-11	s	FILTER, EMI
FL5602	1-234-011-11	s	FILTER, EMI
FL5701	1-234-011-11	s	FILTER, EMI
FL5702	1-234-011-11	s	FILTER, EMI
FL5801	1-234-011-11	s	FILTER, EMI
FL5802	1-234-011-11	s	FILTER, EMI
IC5001	8-759-582-91	s	IC S-80842ANNP-ED6-T2
IC5002	8-759-544-01	s	IC S-80828ANNP-EDR-T2
IC5003	8-759-058-62	s	IC TC7S08FU-TE85R
IC5004	8-759-681-47	s	IC IRMF-A0T-QTP
IC5005	8-759-648-10	s	IC HD64F2633TE
IC5006	8-759-658-90	s	IC 24LC128T-I/SN
IC5007	8-759-327-60	s	IC TC7W125FU-TE12R
IC5008	8-759-277-63	s	IC TC7W14FU (TE12R)
IC5101	8-759-460-72	s	IC BA033FP
IC5102	8-759-460-72	s	IC BA033FP
IC5103	8-759-582-37	s	IC PQ2TZ15U
IC5104	8-759-533-85	s	IC L88M05T-FA-TL
IC5106	8-759-388-31	s	IC PQ20VZ1U
IC5107	8-759-460-72	s	IC BA033FP
IC5108	8-759-645-12	s	IC AD9884AKS-140
IC5109	8-759-460-81	s	IC BA12FP-E2
IC5110	8-759-058-62	s	IC TC7S08FU-TE85R
IC5120	8-759-598-12	s	IC LP2985IM5X-3.5
IC5122	8-759-388-31	s	IC PQ20VZ1U
IC5201	8-759-327-60	s	IC TC7W125FU-TE12R
IC5202*1			IC PW264A
IC5204	8-759-544-01	s	IC S-80828ANNP-EDR-T2

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Ref. No. or Q'ty	Part No.	SP	Description
IC5205	8-759-082-57	s	IC TC7W04FU
IC5206	8-759-475-43	s	IC TC74LCX125FT(EL)
IC5207	8-759-327-60	s	IC TC7W125FU-TE12R
IC5208	8-759-664-83	o	IC MBM29LV400TC-70PFTN-SX1701
IC5209	6-700-749-01	s	IC IDT71V016SA15PH-TLL
IC5210	8-759-523-79	s	IC TC74VHC02FT
IC5251	8-759-647-53	s	IC IMISM530AYB-D REV.T
IC5252	8-759-646-15	s	IC ST49C101ACF8-05-TR
IC5301	8-759-491-46	s	IC TC74VHCT04AFT (EL)
IC5302	8-759-490-41	s	IC TC74VHCT541AFT(EL)
IC5303	8-759-490-41	s	IC TC74VHCT541AFT(EL)
IC5304	8-759-592-38	s	IC CXD9512Q
IC5305*2			IC M24C64-WMN6T(B)
IC5306	8-759-475-43	s	IC TC74LCX125FT(EL)
IC5307	8-759-649-91	s	IC W132-10B-E2
IC5308	8-759-544-01	s	IC S-80828ANNP-EDR-T2
IC5309	8-759-460-72	s	IC BA033FP
IC5310	8-759-490-41	s	IC TC74VHCT541AFT(EL)
IC5311	8-759-195-81	s	IC TC7S86FU
IC5401	8-759-482-47	s	IC M62399FP (TE2)
IC5403	8-752-401-90	s	IC CXD3504R
IC5404	8-759-082-57	s	IC TC7W04FU
IC5501	8-759-645-13	s	IC ADV7123KST140
IC5502	8-759-645-13	s	IC ADV7123KST140
IC5504	8-759-584-86	s	IC M52749FP-TP
IC5505	8-759-584-86	s	IC M52749FP-TP
IC5601	8-752-093-18	s	IC CXA3512R-T6
IC5602	8-752-093-18	s	IC CXA3512R-T6
IC5701	8-752-093-18	s	IC CXA3512R-T6
IC5702	8-752-093-18	s	IC CXA3512R-T6
IC5801	8-752-093-18	s	IC CXA3512R-T6
IC5802	8-752-093-18	s	IC CXA3512R-T6
L5001	1-416-606-11	s	COIL, CHOKE (SMD)
L5101	1-416-606-11	s	COIL, CHOKE (SMD)
L5102	1-416-606-11	s	COIL, CHOKE (SMD)
L5103	1-416-606-11	s	COIL, CHOKE (SMD)
L5104	1-416-606-11	s	COIL, CHOKE (SMD)
L5105	1-416-606-11	s	COIL, CHOKE (SMD)
L5106	1-412-030-11	s	INDUCTOR,CHIP 22UH (3225)
L5107	1-412-030-11	s	INDUCTOR,CHIP 22UH (3225)
L5201	1-412-030-11	s	INDUCTOR,CHIP 22UH (3225)
L5202	1-412-030-11	s	INDUCTOR,CHIP 22UH (3225)
L5203	1-412-030-11	s	INDUCTOR,CHIP 22UH (3225)
L5204	1-412-030-11	s	INDUCTOR,CHIP 22UH (3225)
L5301	1-416-606-11	s	COIL, CHOKE (SMD)
L5302	1-412-030-11	s	INDUCTOR,CHIP 22UH (3225)
L5303	1-412-030-11	s	INDUCTOR,CHIP 22UH (3225)
L5304	1-469-525-91	s	INDUCTOR 10UH (NLFV25)
L5401	1-469-525-91	s	INDUCTOR 10UH (NLFV25)
L5402	1-469-525-91	s	INDUCTOR 10UH (NLFV25)
L5504	1-469-525-91	s	INDUCTOR 10UH (NLFV25)
L5505	1-469-525-91	s	INDUCTOR 10UH (NLFV25)
L5507	1-469-525-91	s	INDUCTOR 10UH (NLFV25)
L5508	1-469-525-91	s	INDUCTOR 10UH (NLFV25)
L5509	1-469-525-91	s	INDUCTOR 10UH (NLFV25)
L5510	1-469-525-91	s	INDUCTOR 10UH (NLFV25)
L5511	1-469-525-91	s	INDUCTOR 10UH (NLFV25)
L5512	1-469-525-91	s	INDUCTOR 10UH (NLFV25)

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Ref. No. or Q'ty	Part No.	SP	Description
L5601	1-469-525-91	s	INDUCTOR 10UH (NLFV25)
L5602	1-469-525-91	s	INDUCTOR 10UH (NLFV25)
L5701	1-469-525-91	s	INDUCTOR 10UH (NLFV25)
L5702	1-469-525-91	s	INDUCTOR 10UH (NLFV25)
L5801	1-469-525-91	s	INDUCTOR 10UH (NLFV25)
L5802	1-469-525-91	s	INDUCTOR 10UH (NLFV25)
Q5001	8-729-230-49	s	TRANSISTOR 2SC2712-YG
Q5002	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q5003	8-729-230-49	s	TRANSISTOR 2SC2712-YG
Q5004	8-729-230-49	s	TRANSISTOR 2SC2712-YG
Q5101	8-729-230-49	s	TRANSISTOR 2SC2712-YG
Q5102	8-729-230-49	s	TRANSISTOR 2SC2712-YG
Q5301	8-729-230-49	s	TRANSISTOR 2SC2712-YG
Q5302	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q5303	8-729-202-38	s	TRANSISTOR 2SC3326N-A
Q5304	8-729-202-38	s	TRANSISTOR 2SC3326N-A
Q5401	8-729-230-49	s	TRANSISTOR 2SC2712-YG
Q5501	8-729-112-65	s	TRANSISTOR 2SA1462
Q5502	8-729-112-65	s	TRANSISTOR 2SA1462
Q5503	8-729-112-65	s	TRANSISTOR 2SA1462
Q5504	8-729-112-65	s	TRANSISTOR 2SA1462
Q5505	8-729-112-65	s	TRANSISTOR 2SA1462
Q5506	8-729-112-65	s	TRANSISTOR 2SA1462
Q5507	8-729-112-65	s	TRANSISTOR 2SA1462
Q5508	8-729-112-65	s	TRANSISTOR 2SA1462
Q5601	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q5602	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q5603	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q5604	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q5701	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q5702	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q5703	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q5704	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q5801	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q5802	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q5803	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
Q5804	8-729-013-28	s	TRANSISTOR HN1B01FU-TE85R
R5001	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5002	1-216-839-11	s	RESISTOR,CHIP 33K 1/16W 1608
R5003	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5004	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5005	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5006	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5007	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5008	1-216-845-11	s	RESISTOR,CHIP 100K 1/16W(1608)
R5010	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5011	1-216-839-11	s	RESISTOR,CHIP 33K 1/16W 1608
R5012	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5013	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5014	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5015	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5016	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5017	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5018	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5019	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5020	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R5021	1-216-826-11	s	RESISTOR,CHIP 2.7K 1/16W(1608)

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Ref. No. or Q'ty	Part No.	SP	Description
R5022	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5023	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5026	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5027	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5028	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5029	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5030	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5032	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5033	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5034	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R5035	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5036	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5037	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5038	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5039	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5040	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5041	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5042	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5044	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5045	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5047	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5048	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5049	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5050	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5051	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5052	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5053	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5054	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5055	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5056	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5057	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5058	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5059	1-218-703-11	s	RESISTOR,CHIP 3.0K 1/16(1608)
R5060	1-218-675-11	s	RESISTOR,CHIP 200 1/16W (1608)
R5061	1-216-841-11	s	RESISTOR, CHIP 47K 1/16W 1608
R5062	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R5063	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5064	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5065	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5066	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5067	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5068	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5069	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5070	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5072	1-216-815-11	s	RESISTOR,CHIP 330 1/16W 1608
R5073	1-216-815-11	s	RESISTOR,CHIP 330 1/16W 1608
R5074	1-216-815-11	s	RESISTOR,CHIP 330 1/16W 1608
R5075	1-216-815-11	s	RESISTOR,CHIP 330 1/16W 1608
R5076	1-216-815-11	s	RESISTOR,CHIP 330 1/16W 1608
R5077	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5078	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5081	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5082	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5083	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5084	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5085	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5086	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5087	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5088	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608

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Ref. No. or Q'ty	Part No.	SP	Description
R5089	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5090	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5091	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5092	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5093	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5094	1-216-848-11	s	RESISTOR,CHIP 180K 1/16 (1608)
R5095	1-216-797-11	s	RESISTOR,CHIP 10 1/16W 1608
R5096	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5097	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5101	1-220-248-11	s	RESISTOR, CHIP 6.8 1/2W (4532)
R5102	1-220-248-11	s	RESISTOR, CHIP 6.8 1/2W (4532)
R5103	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5104	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/16W(1608)
R5105	1-220-248-11	s	RESISTOR, CHIP 6.8 1/2W (4532)
R5108	1-218-723-11	s	RESISTOR,CHIP 20K 1/16W(1608)
R5109	1-218-714-11	s	RESISTOR,CHIP 8.2K 1/16W(1608)
R5110	1-218-685-11	s	RESISTOR,CHIP 510 1/16W
R5111	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5112	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5113	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5114	1-220-250-11	s	RESISTOR,CHIP 10 1/2W (4532)
R5115	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5117	1-220-250-11	s	RESISTOR,CHIP 10 1/2W (4532)
R5119	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5120	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5121	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5122	1-218-696-11	s	RESISTOR,CHIP 1.5K 1/16W(1608)
R5123	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5124	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5125	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5126	1-218-665-11	s	RESISTOR,CHIP 75 1/16W (1608)
R5127	1-218-665-11	s	RESISTOR,CHIP 75 1/16W (1608)
R5128	1-218-665-11	s	RESISTOR,CHIP 75 1/16W (1608)
R5129	1-216-851-11	s	RESISTOR,CHIP 330K 1/16W 1608
R5130	1-216-845-11	s	RESISTOR,CHIP 100K 1/16W(1608)
R5131	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5132	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5135	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5136	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/16W(1608)
R5137	1-218-714-11	s	RESISTOR,CHIP 8.2K 1/16W(1608)
R5138	1-218-723-11	s	RESISTOR,CHIP 20K 1/16W(1608)
R5139	1-218-685-11	s	RESISTOR,CHIP 510 1/16W
R5141	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5201	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5205	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5206	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5207	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5208	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5209	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5210	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5211	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5214	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/16W(1608)
R5215	1-216-827-11	s	RESISTOR, CHIP 3.3K 1/16W 1608
R5216	1-216-827-11	s	RESISTOR, CHIP 3.3K 1/16W 1608
R5217	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5218	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/16W(1608)
R5219	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/16W(1608)
R5220	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5221	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608

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Ref. No. or Q'ty	Part No.	SP	Description
R5222	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5223	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5224	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R5225	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R5226	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5227	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5230	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5231	1-216-839-11	s	RESISTOR,CHIP 33K 1/16W 1608
R5235	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5236	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5241	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5242	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5251	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R5252	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5253	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5254	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/10W(1608)
R5259	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5261	1-216-801-11	s	RESISTOR,CHIP 22 1/10W (1608)
R5265	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5303	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5304	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5305	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5308	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5310	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5312	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5313	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R5314	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5315	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5316	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5320	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5321	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5322	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5323	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5324	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5325	1-216-841-11	s	RESISTOR, CHIP 47K 1/16W 1608
R5326	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R5327	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5328	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5330	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5331	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5334	1-216-831-11	s	RESISTOR,CHIP 6.8K 1/16W(1608)
R5337	1-218-686-11	s	RESISTOR CHIP 560 1/16W (1608)
R5338	1-218-686-11	s	RESISTOR CHIP 560 1/16W (1608)
R5342	1-216-831-11	s	RESISTOR,CHIP 6.8K 1/16W(1608)
R5344	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5345	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5346	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5347	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5348	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5361	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5362	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5363	1-216-841-11	s	RESISTOR, CHIP 47K 1/16W 1608
R5364	1-216-841-11	s	RESISTOR, CHIP 47K 1/16W 1608
R5365	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5366	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5368	1-216-831-11	s	RESISTOR,CHIP 6.8K 1/16W(1608)
R5369	1-216-831-11	s	RESISTOR,CHIP 6.8K 1/16W(1608)
R5370	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5371	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608

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Ref. No. or Q'ty	Part No.	SP	Description
R5372	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/16W(1608)
R5373	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5374	1-216-829-11	s	RESISTOR,CHIP 4.7K 1/16W(1608)
R5375	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5377	1-216-839-11	s	RESISTOR,CHIP 33K 1/16W 1608
R5378	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5379	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5380	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5381	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5382	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5383	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5384	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5387	1-216-801-11	s	RESISTOR,CHIP 22 1/16W (1608)
R5401	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5404	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5405	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5406	1-216-821-11	s	RESISTOR,CHIP 1.0K 1/16W(1608)
R5408	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5409	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5410	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5411	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5412	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5413	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5414	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5415	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5416	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5417	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5418	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5419	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5420	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5427	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5428	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5429	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5430	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5473	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5474	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5475	1-216-839-11	s	RESISTOR,CHIP 33K 1/16W 1608
R5476	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5477	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5501	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5502	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5503	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5504	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5505	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5506	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5507	1-218-665-11	s	RESISTOR,CHIP 75 1/16W (1608)
R5508	1-218-665-11	s	RESISTOR,CHIP 75 1/16W (1608)
R5509	1-218-665-11	s	RESISTOR,CHIP 75 1/16W (1608)
R5510	1-218-665-11	s	RESISTOR,CHIP 75 1/16W (1608)
R5511	1-218-665-11	s	RESISTOR,CHIP 75 1/16W (1608)
R5512	1-218-665-11	s	RESISTOR,CHIP 75 1/16W (1608)
R5515	1-218-672-11	s	RESISTOR,CHIP 150 1/16W(1608)
R5516	1-218-672-11	s	RESISTOR,CHIP 150 1/16W(1608)
R5517	1-218-672-11	s	RESISTOR,CHIP 150 1/16W(1608)
R5518	1-218-672-11	s	RESISTOR,CHIP 150 1/16W(1608)
R5519	1-218-672-11	s	RESISTOR,CHIP 150 1/16W(1608)
R5520	1-218-672-11	s	RESISTOR,CHIP 150 1/16W(1608)
R5525	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5526	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R5527	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5528	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5529	1-216-817-11	s	RESISTOR,CHIP 470 1/16W 1608
R5530	1-216-817-11	s	RESISTOR,CHIP 470 1/16W 1608
R5531	1-216-817-11	s	RESISTOR,CHIP 470 1/16W 1608
R5532	1-216-817-11	s	RESISTOR,CHIP 470 1/16W 1608
R5533	1-216-817-11	s	RESISTOR,CHIP 470 1/16W 1608
R5534	1-216-817-11	s	RESISTOR,CHIP 470 1/16W 1608
R5541	1-216-841-11	s	RESISTOR, CHIP 47K 1/16W 1608
R5542	1-216-853-11	s	RESISTOR,CHIP 470K 1/16W(1608)
R5543	1-216-808-11	s	RESISTOR,CHIP 82 1/16W 1608
R5544	1-216-808-11	s	RESISTOR,CHIP 82 1/16W 1608
R5545	1-216-808-11	s	RESISTOR,CHIP 82 1/16W 1608
R5546	1-216-841-11	s	RESISTOR, CHIP 47K 1/16W 1608
R5547	1-216-853-11	s	RESISTOR,CHIP 470K 1/16W(1608)
R5548	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5549	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5550	1-216-808-11	s	RESISTOR,CHIP 82 1/16W 1608
R5552	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5554	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5555	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5556	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5557	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5558	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5559	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5560	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5561	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5562	1-216-817-11	s	RESISTOR,CHIP 470 1/16W 1608
R5564	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R5565	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R5566	1-216-817-11	s	RESISTOR,CHIP 470 1/16W 1608
R5568	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R5569	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R5570	1-216-817-11	s	RESISTOR,CHIP 470 1/16W 1608
R5572	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R5573	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R5574	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5575	1-216-817-11	s	RESISTOR,CHIP 470 1/16W 1608
R5577	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R5578	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R5579	1-216-817-11	s	RESISTOR,CHIP 470 1/16W 1608
R5581	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R5582	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R5583	1-216-817-11	s	RESISTOR,CHIP 470 1/16W 1608
R5585	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R5586	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R5587	1-216-833-11	s	RESISTOR,CHIP 10K 1/16W (1608)
R5607	1-218-271-11	s	RESISTOR,CHIP 2K 1/16W (1608)
R5614	1-218-271-11	s	RESISTOR,CHIP 2K 1/16W (1608)
R5615	1-218-271-11	s	RESISTOR,CHIP 2K 1/16W (1608)
R5617	1-216-828-11	s	RESISTOR, CHIP 3.9K 1/16W 1608
R5618	1-216-828-11	s	RESISTOR, CHIP 3.9K 1/16W 1608
R5619	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5620	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5621	1-218-271-11	s	RESISTOR,CHIP 2K 1/16W (1608)
R5622	1-216-828-11	s	RESISTOR, CHIP 3.9K 1/16W 1608
R5623	1-216-828-11	s	RESISTOR, CHIP 3.9K 1/16W 1608
R5628	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5629	1-216-864-11	s	CONDUCTOR, CHIP (1608)

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R5643	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5644	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5645	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5646	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5647	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5648	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5649	1-216-789-11	s	RESISTOR,CHIP 2.2 1/16W(1608)
R5650	1-216-789-11	s	RESISTOR,CHIP 2.2 1/16W(1608)
R5651	1-216-812-11	s	RESISTOR,CHIP 180 1/16W 1608
R5652	1-216-789-11	s	RESISTOR,CHIP 2.2 1/16W(1608)
R5653	1-216-789-11	s	RESISTOR,CHIP 2.2 1/16W(1608)
R5654	1-216-812-11	s	RESISTOR,CHIP 180 1/16W 1608
R5695	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5696	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5707	1-218-271-11	s	RESISTOR,CHIP 2K 1/16W (1608)
R5714	1-218-271-11	s	RESISTOR,CHIP 2K 1/16W (1608)
R5715	1-218-271-11	s	RESISTOR,CHIP 2K 1/16W (1608)
R5717	1-216-828-11	s	RESISTOR, CHIP 3.9K 1/16W 1608
R5718	1-216-828-11	s	RESISTOR, CHIP 3.9K 1/16W 1608
R5719	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5720	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5721	1-218-271-11	s	RESISTOR,CHIP 2K 1/16W (1608)
R5722	1-216-828-11	s	RESISTOR, CHIP 3.9K 1/16W 1608
R5723	1-216-828-11	s	RESISTOR, CHIP 3.9K 1/16W 1608
R5728	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5729	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5743	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5744	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5745	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5746	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5747	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5748	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5749	1-216-789-11	s	RESISTOR,CHIP 2.2 1/16W(1608)
R5750	1-216-789-11	s	RESISTOR,CHIP 2.2 1/16W(1608)
R5751	1-216-812-11	s	RESISTOR,CHIP 180 1/16W 1608
R5752	1-216-789-11	s	RESISTOR,CHIP 2.2 1/16W(1608)
R5753	1-216-789-11	s	RESISTOR,CHIP 2.2 1/16W(1608)
R5754	1-216-812-11	s	RESISTOR,CHIP 180 1/16W 1608
R5795	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5796	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5807	1-218-271-11	s	RESISTOR,CHIP 2K 1/16W (1608)
R5814	1-218-271-11	s	RESISTOR,CHIP 2K 1/16W (1608)
R5815	1-218-271-11	s	RESISTOR,CHIP 2K 1/16W (1608)
R5817	1-216-828-11	s	RESISTOR, CHIP 3.9K 1/16W 1608
R5818	1-216-828-11	s	RESISTOR, CHIP 3.9K 1/16W 1608
R5819	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5820	1-216-805-11	s	RESISTOR,CHIP 47 1/16W 1608
R5821	1-218-271-11	s	RESISTOR,CHIP 2K 1/16W (1608)
R5822	1-216-828-11	s	RESISTOR, CHIP 3.9K 1/16W 1608
R5823	1-216-828-11	s	RESISTOR, CHIP 3.9K 1/16W 1608
R5828	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5829	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5843	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5844	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5845	1-216-809-11	s	RESISTOR,CHIP 100 1/16W 1608
R5846	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5847	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5848	1-216-825-11	s	RESISTOR,CHIP 2.2K 1/16W 1608
R5849	1-216-789-11	s	RESISTOR,CHIP 2.2 1/16W(1608)

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R5850	1-216-789-11	s	RESISTOR,CHIP 2.2 1/16W(1608)
R5851	1-216-812-11	s	RESISTOR,CHIP 180 1/16W 1608
R5852	1-216-789-11	s	RESISTOR,CHIP 2.2 1/16W(1608)
R5853	1-216-789-11	s	RESISTOR,CHIP 2.2 1/16W(1608)
R5854	1-216-812-11	s	RESISTOR,CHIP 180 1/16W 1608
R5895	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R5896	1-216-864-11	s	CONDUCTOR, CHIP (1608)
RB5031	1-233-576-11	s	RESISTOR,CHIP NETWORK 100
RB5032	1-233-576-11	s	RESISTOR,CHIP NETWORK 100
RB5075	1-233-576-11	s	RESISTOR,CHIP NETWORK 100
RB5076	1-233-576-11	s	RESISTOR,CHIP NETWORK 100
RB5101	1-233-576-11	s	RESISTOR,CHIP NETWORK 100
RB5102	1-233-576-11	s	RESISTOR,CHIP NETWORK 100
RB5103	1-233-576-11	s	RESISTOR,CHIP NETWORK 100
RB5104	1-233-576-11	s	RESISTOR,CHIP NETWORK 100
RB5105	1-233-576-11	s	RESISTOR,CHIP NETWORK 100
RB5106	1-233-576-11	s	RESISTOR,CHIP NETWORK 100
RB5107	1-233-576-11	s	RESISTOR,CHIP NETWORK 100
RB5108	1-233-576-11	s	RESISTOR,CHIP NETWORK 100
RB5109	1-233-576-11	s	RESISTOR,CHIP NETWORK 100
RB5110	1-233-576-11	s	RESISTOR,CHIP NETWORK 100
RB5111	1-233-576-11	s	RESISTOR,CHIP NETWORK 100
RB5112	1-233-576-11	s	RESISTOR,CHIP NETWORK 100
RB5213	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5214	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5215	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5216	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5217	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5218	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5219	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5220	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5221	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5222	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5223	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5224	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5301	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5302	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5303	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5305	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5306	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5307	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5308	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5309	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5310	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5311	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5312	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5313	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5314	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5315	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5316	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5317	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5318	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5319	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5320	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5321	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5322	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5323	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5401	1-233-576-11	s	RESISTOR,CHIP NETWORK 100

(C BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
RB5402	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5403	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5404	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5405	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5406	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5407	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5408	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5409	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5410	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5411	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5412	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5413	1-239-409-11	s	RESISTOR NETWORK 47 (1608)
RB5414	1-233-576-11	s	RESISTOR,CHIP NETWORK 100
RB5601	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5602	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5603	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5604	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5701	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5702	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5703	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5704	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5801	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5802	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5803	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
RB5804	1-233-574-11	s	RESISTOR,CHIP NETWORK 10
S5202	1-571-674-11	s	SWITCH,SLIDE (2-2-2)
S5301	1-571-674-11	s	SWITCH,SLIDE (2-2-2)
TH5001	1-808-656-11	s	THERMISTOR
X5063	1-781-659-11	s	VIBRATOR, CRYSTAL
X5201	1-781-774-11	s	VIBRATOR, CRYSTAL
X5202	1-781-354-11	s	OSCILLATOR, CRYSTAL

TH BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-675-920-11	o	PRINTED WIRING BOARD, TH
CN8400	1-580-057-11	o	PIN,CONNECTOR 4P
TH8400	1-808-656-11	s	THERMISTOR

NF BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-675-776-11	o	PRINTED WIRING BOARD, NF
C8000	1-124-589-11	s	CAPACITOR,ELECT 47MF/16V
CN8000	1-564-518-11	o	PLUG,CONNECTOR 3P
IC8000	8-749-011-03	s	IC GP1U26X
R8000	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R8001	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)

NR BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-675-771-11	o	PRINTED WIRING BOARD, NR
C8100	1-124-589-11	s	CAPACITOR,ELECT 47MF/16V
CN8100	1-564-518-11	o	PLUG,CONNECTOR 3P
IC8100	8-749-011-03	s	IC GP1U26X
R8100	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R8101	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)

U BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-675-772-11	o	PRINTED WIRING BOARD, U
CN8200	1-564-517-11	o	PLUG,CONNECTOR (2P)(L-TYPE)
S8200	1-570-245-11	s	SWITCH,MICRO

V BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-675-773-11	o	PRINTED WIRING BOARD, V
CN8300	1-564-517-11	o	PLUG,CONNECTOR (2P)(L-TYPE)
S8300	1-570-245-11	s	SWITCH,MICRO

G BOARD

Ref. No. or Q'ty	Part No.	SP	Description
2pcs	7-682-647-09	s	SCREW +PS 3X6(EP-FE/ZNBK/CM2)
2pcs	7-682-648-09	s	SCREW +PS 3X8(EP-FE/ZNBK/CM2)
2pcs	7-682-650-09	s	SCREW +PS 3X12(EP-FE/ZNBK/CM2)
C2002	⚠ 1-137-477-11	s	CAPCITOR,FILM 0.47MF/400V
C2003	⚠ 1-161-964-11	s	CAPACITOR CERAMIC 4700PF F
C2004	⚠ 1-161-964-11	s	CAPACITOR CERAMIC 4700PF F
C2005	⚠ 1-161-964-11	s	CAPACITOR CERAMIC 4700PF F
C2007	1-117-228-11	s	CAPACITOR,FILM 2.2MF/450V
C2008	1-163-251-11	s	CAPACITOR CERAMIC 100PF/50V
C2009	1-115-340-11	s	CAPACITOR CERAMIC 0.22MF/25V B
C2010	1-107-909-11	s	CAPACITOR,ELECT 47MF/50V
C2013	1-135-449-11	s	CAPCITOR ELECT 220MF/450V
C2014	1-135-449-11	s	CAPCITOR ELECT 220MF/450V
C2015	1-117-227-11	s	CAPACITOR,PE FILM 1.0MF/450V
C2016	1-115-339-11	s	CAPACITOR,CERAMIC 0.1MF/50V
C2101	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C2103	1-126-163-11	s	CAPACITOR,ELECT 4.7MF/50V
C2104	1-104-830-11	s	CAPACITOR,ELECT 10MF/50V(AU)
C2105	1-130-495-00	s	CAPACITOR FILM 0.1MF/50V PETP
C2106	1-130-029-00	s	CAPACITOR, FILM 0.0082MF/50V
C2107	1-104-830-11	s	CAPACITOR,ELECT 10MF/50V(AU)
C2108	1-107-909-11	s	CAPACITOR,ELECT 47MF/50V
C2109	1-131-974-11	s	CAP, METALIZED PP FILM / 16 V
C2110	1-131-974-11	s	CAP, METALIZED PP FILM / 16 V
C2111	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C2112	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C2201	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C2202	1-115-743-11	s	CAPACITOR ELECT 3300MF/10V 105
C2203	1-115-737-11	s	CAPACITOR,ELECT 1000MF/10V
C2204	1-115-743-11	s	CAPACITOR ELECT 3300MF/10V 105
C2205	1-115-792-11	s	CAPACITOR ELECT 2200MF/25V 105
C2206	1-115-792-11	s	CAPACITOR ELECT 2200MF/25V 105
C2207	1-115-339-11	s	CAPACITOR,CERAMIC 0.1MF/50V
C2209	1-115-339-11	s	CAPACITOR,CERAMIC 0.1MF/50V
C2210	1-107-888-11	s	CAPACITOR, ELECT 47MF/25V(105)
C2211	1-107-888-11	s	CAPACITOR, ELECT 47MF/25V(105)
C2212	1-107-909-11	s	CAPACITOR,ELECT 47MF/50V
C2213	1-107-909-11	s	CAPACITOR,ELECT 47MF/50V
C2214	1-107-909-11	s	CAPACITOR,ELECT 47MF/50V
C2216	1-109-994-11	s	CAPACITOR,CHIP CERAMIC 2.2MF B
C2301	1-115-339-11	s	CAPACITOR,CERAMIC 0.1MF/50V
C2302	1-115-339-11	s	CAPACITOR,CERAMIC 0.1MF/50V
C2303	1-107-888-11	s	CAPACITOR, ELECT 47MF/25V(105)
C2304	1-107-888-11	s	CAPACITOR, ELECT 47MF/25V(105)
C2305	1-115-339-11	s	CAPACITOR,CERAMIC 0.1MF/50V
C2306	1-115-339-11	s	CAPACITOR,CERAMIC 0.1MF/50V
C2307	1-107-882-11	s	CAPACITOR,ELECT 100MF 16V
C2308	1-107-882-11	s	CAPACITOR,ELECT 100MF 16V
C2309	1-107-888-11	s	CAPACITOR, ELECT 47MF/25V(105)
C2310	1-107-888-11	s	CAPACITOR, ELECT 47MF/25V(105)
C2311	1-107-888-11	s	CAPACITOR, ELECT 47MF/25V(105)
CN2001	1-691-960-21	o	PIN, CONNECTOR (PC BOARD) 3P
CN2002	1-691-960-11	o	PIN,CONNECTOR (PC BOARD) 3P
CN2003	1-764-334-11	s	PIN,CONNECTOR(11P)(V-TYPE)
CN2004	1-564-511-11	o	PLUG,CONNECTOR (8P)
CN2005	1-564-509-11	o	PLUG,CONNECTOR (6P)
CN2006	1-785-518-11	o	CONNECTOR, BOARD TO BOARD (PLU
CN2007	1-774-248-11	o	CONNECTOR, BOARD TO BOARD

(G BOARD)

Ref. No. or Q'ty	Part No.	SP	Description	
CN2008	1-564-507-11	o	PLUG,CONNECTOR (4P)	
CN2009	1-564-506-11	o	PLUG,CONNECTOR (3P)	
CN2010	1-564-506-11	o	PLUG,CONNECTOR (3P)	
D2001	⚠ 8-719-911-19	s	DIODE 1SS119-25	
D2002	8-719-106-88	s	DIODE RD15M-B1	
D2003	⚠ 8-719-066-75	s	DIODE D6SB80	
D2004	8-719-304-63	s	DIODE RM11C	(RECTI)
D2005	8-719-510-02	s	DIODE D1NS4	
D2101	8-719-510-02	s	DIODE D1NS4	
D2102	8-719-979-64	s	DIODE UF4005PKG23	
D2103	8-719-979-64	s	DIODE UF4005PKG23	
D2104	8-719-110-36	s	DIODE RD13ES-B2	
D2201	8-719-510-12	s	DIODE D10SC4M	
D2202	8-719-510-12	s	DIODE D10SC4M	
D2203	8-719-510-12	s	DIODE D10SC4M	
D2204	8-719-510-12	s	DIODE D10SC4M	
D2205	8-719-510-02	s	DIODE D1NS4	
D2206	8-719-073-01	s	DIODE MA111-(K8).S0	
D2301	8-719-073-01	s	DIODE MA111-(K8).S0	
D2302	8-719-073-01	s	DIODE MA111-(K8).S0	
IC2001	8-749-015-27	s	IC MZ1540	
IC2101	8-749-013-78	s	IC MCR5102	
IC2201	8-759-388-23	s	IC TL431BCDR2	
IC2202	8-759-388-23	s	IC TL431BCDR2	
IC2301	8-759-998-98	s	IC LM358D	
IC2302	8-759-592-79	s	IC BA00AST	
IC2303	8-759-592-79	s	IC BA00AST	
L2001	1-419-987-11	s	COIL, CHOKE 1290UH	
L2003	1-419-302-11	s	COIL, CHOKE 250UH	
L2201	1-412-525-31	s	MICRO INDUCTOR 10UH	
L2202	1-412-525-31	s	MICRO INDUCTOR 10UH	
L2203	1-406-659-11	s	COIL CHOKE 10UH	
L2204	1-412-525-31	s	MICRO INDUCTOR 10UH	
L2205	1-406-659-11	s	COIL CHOKE 10UH	
PH2101	8-749-010-64	s	PHOTO COUPLER PC123F2	
PH2102	8-749-010-64	s	PHOTO COUPLER PC123F2	
Q2001	8-729-119-76	s	TRANSISTOR 2SA1175-HFE	
Q2101	8-729-140-97	s	TRANSISTOR 2SB734-34	
Q2103	8-729-140-97	s	TRANSISTOR 2SB734-34	
Q2201	8-729-230-49	s	TRANSISTOR 2SC2712-YG	
Q2202	8-729-216-22	s	TRANSISTOR 2SA1162-G	
Q2203	8-729-230-49	s	TRANSISTOR 2SC2712-YG	
Q2204	8-729-216-22	s	TRANSISTOR 2SA1162-G	
Q2301	1-801-806-11	s	TRANSISTOR DTC144EKA	
Q2302	1-801-806-11	s	TRANSISTOR DTC144EKA	
Q2303	1-801-806-11	s	TRANSISTOR DTC144EKA	
Q2304	1-801-806-11	s	TRANSISTOR DTC144EKA	
R2001	1-215-866-11	s	RESISTOR,METAL FILM 330/1W	
R2002	1-215-866-11	s	RESISTOR,METAL FILM 330/1W	
R2003	⚠ 1-219-363-11	s	RESISTOR, CEMENT 5.6/5W (FUSE)	
R2004	1-216-063-91	s	RESISTOR,CHIP 3.9K 1/10W(2125)	
R2005	1-216-065-91	s	RESISTOR,CHIP 4.7K 1/10W(2012)	
R2006	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)	
R2007	1-219-738-11	s	RES, 0.08 (REGISTOR, METAL)	
R2101	1-202-933-61	s	RESISTOR, FUSE 0.1 1/2W	
R2102	1-216-345-11	s	RESISTOR,METAL FILM 0.47 1W	

(G BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R2103	1-216-682-11	s	RESISTOR,CHIP 20K 1/10W (2012)
R2104	1-216-659-11	s	RESISTOR,CHIP 2.2K 1/10W(2012)
R2105	1-216-675-11	s	RESISTOR,CHIP 10K 1/10W(2012)
R2106	1-260-135-11	s	RESISTOR,CARBON 1M 1/2W
R2108	1-216-659-11	s	RESISTOR,CHIP 2.2K 1/10W(2012)
R2109	1-260-135-11	s	RESISTOR,CARBON 1M 1/2W
R2112	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R2113	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R2116	1-249-389-11	s	RES,CARBON 4.7 1/4W
R2117	1-260-135-11	s	RESISTOR,CARBON 1M 1/2W
R2118	1-260-135-11	s	RESISTOR,CARBON 1M 1/2W
R2119	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R2120	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R2123	1-249-389-11	s	RES,CARBON 4.7 1/4W
R2125	1-216-041-00	s	RESISTOR, CHIP 470 1/10W(2012)
R2126	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R2127	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R2128	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R2130	1-218-759-11	s	RESISTOR,CHIP 200K 1/10W(2012)
R2131	1-218-759-11	s	RESISTOR,CHIP 200K 1/10W(2012)
R2132	1-218-759-11	s	RESISTOR,CHIP 200K 1/10W(2012)
R2133	1-218-759-11	s	RESISTOR,CHIP 200K 1/10W(2012)
R2134	1-218-759-11	s	RESISTOR,CHIP 200K 1/10W(2012)
R2135	1-218-759-11	s	RESISTOR,CHIP 200K 1/10W(2012)
R2136	1-218-760-11	s	RESISTOR,CHIP 220K 1/10W(2012)
R2201	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R2202	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R2203	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R2204	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R2205	1-216-061-00	s	RESISTOR CHIP 3.3K 1/10W(2012)
R2206	1-216-041-00	s	RESISTOR, CHIP 470 1/10W(2012)
R2207	1-216-663-11	s	RESISTOR,CHIP 3.3K 1/10W(2012)
R2208	1-216-661-11	s	RESISTOR,CHIP 2.7K 1/10W(2012)
R2209	1-216-663-11	s	RESISTOR,CHIP 3.3K 1/10W(2012)
R2210	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R2211	1-216-659-11	s	RESISTOR,CHIP 2.2K 1/10W(2012)
R2212	1-216-687-11	s	RESISTOR CHIP 33K 1/10W (2012)
R2213	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R2214	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R2215	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R2216	1-216-081-00	s	RESISTOR,CHIP 22K 1/10W(2012)
R2217	1-216-663-11	s	RESISTOR,CHIP 3.3K 1/10W(2012)
R2218	1-216-671-11	s	RESISTOR,CHIP 6.8K 1/10W(2012)
R2219	1-216-097-00	s	RESISTOR CHIP 100K 1/10W(2012)
R2220	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R2221	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R2223	1-216-864-11	s	CONDUCTOR, CHIP (1608)
R2301	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R2302	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R2303	1-216-669-11	s	RESISTOR,CHIP 5.6K 1/10W(2012)
R2304	1-216-669-11	s	RESISTOR,CHIP 5.6K 1/10W(2012)
R2305	1-216-679-11	s	RESISTOR,CHIP 15K 1/10W (2012)
R2306	1-216-659-11	s	RESISTOR,CHIP 2.2K 1/10W(2012)
R2307	1-216-681-11	s	RESISTOR,CHIP 18K 1/10W (2012)
R2308	1-216-659-11	s	RESISTOR,CHIP 2.2K 1/10W(2012)
R2309	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R2310	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R2311	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R2312	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)

(G BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R2313	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R2314	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R2315	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R2316	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R2318	1-216-295-91	s	CONDUCTOR, CHIP (2012)
RY2001 ⚠	1-755-275-11	s	RELAY, AC POWER (12V)
T2101	1-435-235-11	s	TRANSFORMER, CONVERTER (PIT)

Q BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-1300-736-A	s	MOUNTED CIRCUIT BOARD, Q
C4001	1-163-009-11	s	CAPACITOR,CERAMIC 1000PF/50V
C4002	1-163-009-11	s	CAPACITOR,CERAMIC 1000PF/50V
C4003	1-163-009-11	s	CAPACITOR,CERAMIC 1000PF/50V
C4004	1-163-009-11	s	CAPACITOR,CERAMIC 1000PF/50V
C4005	1-163-133-00	s	CAPACITOR,CHIP CERAMIC 470PF
C4006	1-163-009-11	s	CAPACITOR,CERAMIC 1000PF/50V
C4007	1-163-009-11	s	CAPACITOR,CERAMIC 1000PF/50V
C4008	1-163-009-11	s	CAPACITOR,CERAMIC 1000PF/50V
C4009	1-163-009-11	s	CAPACITOR,CERAMIC 1000PF/50V
C4010	1-109-994-11	s	CAPACITOR,CHIP CERAMIC 2.2MF B
C4011	1-109-994-11	s	CAPACITOR,CHIP CERAMIC 2.2MF B
C4012	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C4013	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4014	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4015	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4016	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4017	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4018	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4019	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C4020	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C4021	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C4022	1-163-245-11	s	CAPACITOR CERAMIC 56PF/50V
C4023	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4024	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4025	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4026	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4027	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4028	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4029	1-128-453-21	s	CAPACITOR,ELECT 47MF
C4030	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4031	1-128-453-21	s	CAPACITOR,ELECT 47MF
C4032	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4033	1-128-453-21	s	CAPACITOR,ELECT 47MF
C4034	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4035	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4040	1-104-601-11	s	CAP,ELECT 10MF/10V (BP)(CHIP)
C4041	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C4042	1-104-601-11	s	CAP,ELECT 10MF/10V (BP)(CHIP)
C4043	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C4044	1-164-344-11	s	CAPACITOR CERAMIC 68000PF (M-)
C4045	1-124-779-00	s	CAPACITOR,ELECT 10MF/16V
C4046	1-128-013-11	s	CAPACITOR ERECT 1MF/50V
C4047	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4048	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4049	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4050	1-163-259-91	s	CAPACITOR,CHIP CERAMIC 220PF
C4051	1-163-251-11	s	CAPACITOR CERAMIC 100PF/50V
C4052	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C4053	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4054	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4055	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4056	1-163-251-11	s	CAPACITOR CERAMIC 100PF/50V
C4058	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4059	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4060	1-124-778-00	s	CAPACITOR,ELECT 22MF/6.3V
C4061	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C4062	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V

(Q BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C4063	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C4064	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4065	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4066	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C4067	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C4068	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C4069	1-163-131-00	s	CAPACITOR,CHIP CERAMIC 390PF
C4070	1-163-251-11	s	CAPACITOR CERAMIC 100PF/50V
C4071	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4072	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4073	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4074	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4075	1-128-008-11	s	CAPACITOR ERECT 3,3MF/35V
C4079	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C4080	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4082	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4083	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C4084	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4085	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4086	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4087	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4088	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4089	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4090	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4091	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4092	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4093	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4094	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C4095	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4098	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4099	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4100	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4101	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4102	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4103	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4104	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4105	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4106	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4107	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4108	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4109	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4110	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C4111	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4112	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4113	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4114	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4115	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4116	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4117	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4118	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4119	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4120	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4121	1-126-189-11	s	CAPACITOR ERECT 0.22MF/50V
C4122	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4123	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4124	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4125	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4126	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C4127	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V

(Q BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C4128	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4129	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C4130	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C4131	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C4132	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4133	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4134	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4135	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4136	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4137	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C4138	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C4139	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C4140	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4141	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C4144	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4147	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4148	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4149	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4150	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4151	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4152	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C4153	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4154	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4155	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C4156	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4157	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4158	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4159	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C4160	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C4161	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4162	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4163	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C4164	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4165	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C4166	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C4167	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C4168	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C4169	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4170	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4171	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4172	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4173	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C4174	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4175	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4176	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4177	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4178	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4179	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4180	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4181	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4182	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4183	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4184	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4185	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4186	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4187	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4188	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4189	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4190	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V

(Q BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C4191	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4192	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4193	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4194	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4195	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C4197	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C4199	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C4201	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C4202	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4203	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4204	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C4205	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4206	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4207	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4208	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4209	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4210	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C4211	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4212	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4213	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4216	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4217	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4218	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4219	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4220	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4221	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4222	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4223	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4224	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4225	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4226	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4227	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4228	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4229	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4230	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4231	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4232	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4233	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4234	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4235	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4236	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4237	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4238	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4239	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4240	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4241	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4242	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4243	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4244	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4245	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4246	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4247	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4248	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4249	1-128-006-11	s	CAPACITOR ERECT 4.7MF/25V(CHIP
C4250	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4251	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C4252	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4253	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4254	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V

(Q BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C4255	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4256	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C4257	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4258	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C4259	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C4260	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C4261	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C4262	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4263	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4264	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4265	1-163-235-11	s	CAPACITOR,CHIP CERAMIC22PF/50V
C4268	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4269	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C4270	1-128-013-11	s	CAPACITOR ERECT 1MF/50V
C4271	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C4272	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4273	1-126-395-11	s	CAPACITOR,ELECT 22MF/16V(CHIP)
C4274	1-126-395-11	s	CAPACITOR,ELECT 22MF/16V(CHIP)
C4275	1-128-013-11	s	CAPACITOR ERECT 1MF/50V
C4276	1-126-395-11	s	CAPACITOR,ELECT 22MF/16V(CHIP)
C4277	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C4278	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4281	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4282	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C4283	1-163-009-11	s	CAPACITOR,CERAMIC 1000PF/50V
C4284	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C4285	1-126-603-11	s	CAPACITOR,ELECT 4.7MF/35V
C4286	1-163-251-11	s	CAPACITOR CERAMIC 100PF/50V
CN4001	1-537-797-12	s	TERMINAL BOARD ASSY, I/O (RS-232C)
CN4002	1-793-797-21	o	CONNECTOR, BOARD TO BOARD
CN4003	1-778-373-11	o	PIN, CONNECTOR (PC BOARD)
CN4004	1-785-305-21	o	CONNECTOR, BOARD TO BOARD
CN4005	1-778-373-11	o	PIN, CONNECTOR (PC BOARD)
CN4006	1-778-373-11	o	PIN, CONNECTOR (PC BOARD)
D4001	8-719-037-22	s	DIODE RD12SB-T1
D4002	8-719-158-37	s	DIODE RD9.1SB2
D4003	8-719-914-43	s	DIODE DAN202K
D4004	8-719-914-43	s	DIODE DAN202K
D4005	8-719-914-44	s	DIODE DAP202K (DUAL)
D4006	8-719-037-53	s	DIODE RD27SB-T1
D4007	8-719-914-42	s	DIODE DA204K
D4008	8-719-037-53	s	DIODE RD27SB-T1
D4009	8-719-037-53	s	DIODE RD27SB-T1
D4010	8-719-914-42	s	DIODE DA204K
D4011	8-719-037-53	s	DIODE RD27SB-T1
D4012	8-719-158-37	s	DIODE RD9.1SB2
D4013	8-719-158-37	s	DIODE RD9.1SB2
D4014	8-719-158-37	s	DIODE RD9.1SB2
D4015	8-719-800-76	s	DIODE 1SS226
D4016	8-719-800-76	s	DIODE 1SS226
D4017	8-719-800-76	s	DIODE 1SS226
D4018	8-719-800-76	s	DIODE 1SS226
D4019	8-719-800-76	s	DIODE 1SS226
D4021	8-719-914-43	s	DIODE DAN202K
D4022	8-719-914-43	s	DIODE DAN202K
D4023	8-719-914-43	s	DIODE DAN202K
D4024	8-719-083-58	s	DIODE UDZSTE-173.9B

(Q BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
D4032	8-719-914-43	s	DIODE DAN202K
D4033	8-719-914-43	s	DIODE DAN202K
D4034	8-719-914-43	s	DIODE DAN202K
FL4001	1-234-346-21	s	FILTER, LOW PASS
FL4002	1-234-346-21	s	FILTER, LOW PASS
FL4003	1-234-345-21	s	FILTER, LOW PASS
FL4004	1-234-344-21	s	FILTER, LOW PASS
FL4005	1-234-344-21	s	FILTER, LOW PASS
FL4006	1-234-343-21	s	FILTER, LOW PASS
IC4001	8-759-285-61	s	IC PC74HC123D-T
IC4002	8-759-252-59	s	IC MAX202CSE
IC4003	8-759-457-53	s	IC GS1881-CTA
IC4004	8-752-072-81	s	IC CXA1875AM
IC4005	8-752-072-81	s	IC CXA1875AM
IC4006	8-759-646-02	s	IC M52347FP-TE
IC4007	8-759-491-93	s	IC EL4332CS-TE2
IC4008	8-759-185-75	s	IC TC74VHC123AF (EL)
IC4009	8-759-174-16	s	IC TC74VHC244F
IC4010	8-759-524-24	o	IC TC7WT241FU(TE12R)
IC4011	8-759-038-15	s	IC MC74HC4538AF
IC4012	8-759-344-12	s	IC GS4981CTA
IC4013	8-752-086-33	s	IC CXA2101AQ-TL
IC4014	8-759-433-92	s	IC TC7W14F-TE12L
IC4015	8-759-460-72	s	IC BA033FP
IC4018	8-759-539-89	s	IC LM2990SX-5.0
IC4021	8-759-988-13	s	IC LM393PS
IC4022	8-759-353-02	s	IC NJM2533M (TE2)
IC4023	8-759-988-13	s	IC LM393PS
IC4024	8-759-353-02	s	IC NJM2533M (TE2)
IC4025	8-759-353-02	s	IC NJM2533M (TE2)
IC4026	8-759-988-13	s	IC LM393PS
IC4027	8-759-353-02	s	IC NJM2533M (TE2)
IC4028	8-759-460-72	s	IC BA033FP
IC4029	8-759-447-90	s	IC TLC5733AIPM
IC4030	8-752-072-81	s	IC CXA1875AM
IC4031	8-759-669-78	s	IC TLC2933IPWR-12
IC4032	8-749-015-18	s	IC PQ07VZ012P
IC4033	8-752-409-78	s	IC CXD2095AQ
IC4034	8-759-669-75	s	IC TLC2932IPWR
IC4035	8-759-676-70	s	IC MSM56V16160F-10TS-K
IC4036	8-759-700-78	s	IC NJM082M
IC4038	8-759-092-80	s	IC SN75157PS
IC4039	8-759-031-84	s	IC SC7S04F
J4001	1-563-935-11	s	JACK (DIA 3.5)(BLK)(TRIGGER)
J4002	1-563-935-11	s	JACK (DIA 3.5)(BLK) (CONTROL S IN)
J4003	1-793-742-11	s	TERMINAL BLOCK, S(S-VIDEO)
J4004	1-770-146-11	s	JACK BLOCK,PIN 3P(INPUT-A)
J4005	1-793-743-11	s	JACK BLOCK, PIN(INPUT-A)
J4006	1-770-146-11	s	JACK BLOCK,PIN 3P(INPUT-B)
J4007	1-793-743-11	s	JACK BLOCK, PIN(INPUT-B)
L4001	1-412-363-11	s	FERRITE, EMI (SMD)
L4002	1-412-363-11	s	FERRITE, EMI (SMD)
L4003	1-412-363-11	s	FERRITE, EMI (SMD)
L4004	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4005	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4006	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH

(Q BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
L4007	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4008	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4009	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4010	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4011	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4012	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4013	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4014	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4015	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4016	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4017	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4018	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4019	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4020	1-412-533-21	s	MICRO INDUCTOR 47UH
L4023	1-412-533-21	s	MICRO INDUCTOR 47UH
L4024	1-412-533-21	s	MICRO INDUCTOR 47UH
L4025	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4026	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4027	1-412-533-21	s	MICRO INDUCTOR 47UH
L4028	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4029	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4030	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4031	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4032	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4033	1-412-064-11	s	INDUCTOR,SMALL TYPE 100UF
L4034	1-412-064-11	s	INDUCTOR,SMALL TYPE 100UF
L4035	1-412-052-21	s	INDUCTOR, SMALL TYPE 1.00UH
L4036	1-408-595-31	s	MICRO INDUCTOR 2.2UH
L4037	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4038	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4039	1-412-064-11	s	INDUCTOR,SMALL TYPE 100UF
L4040	1-412-064-11	s	INDUCTOR,SMALL TYPE 100UF
L4041	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4042	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4043	1-408-595-31	s	MICRO INDUCTOR 2.2UH
L4044	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4045	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L4046	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
Q4001	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q4002	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q4003	1-801-806-11	s	TRANSISTOR DTC144EKA
Q4004	1-801-806-11	s	TRANSISTOR DTC144EKA
Q4005	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4006	8-729-027-43	s	TRANSISTOR DTC114EKA-T146
Q4007	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q4008	8-729-027-43	s	TRANSISTOR DTC114EKA-T146
Q4011	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4012	8-729-027-43	s	TRANSISTOR DTC114EKA-T146
Q4013	1-801-806-11	s	TRANSISTOR DTC144EKA
Q4014	8-729-027-43	s	TRANSISTOR DTC114EKA-T146
Q4015	8-729-107-31	s	TRANSISTOR 2SC3545
Q4016	8-729-107-31	s	TRANSISTOR 2SC3545
Q4017	8-729-107-31	s	TRANSISTOR 2SC3545
Q4018	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4019	8-729-101-07	s	TRANSISTOR 2SB798
Q4020	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q4021	8-729-026-57	s	TRANSISTOR FMS1A-T148
Q4022	8-729-026-57	s	TRANSISTOR FMS1A-T148

(Q BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
Q4023	8-729-026-57	s	TRANSISTOR FMS1A-T148
Q4024	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4025	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q4026	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q4027	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q4028	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q4029	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q4030	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q4031	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4032	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4033	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4034	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4035	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q4036	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4037	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4038	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4039	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4040	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4041	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4042	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4043	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4045	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4046	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4047	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q4048	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4049	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4050	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q4051	1-801-806-11	s	TRANSISTOR DTC144EKA
Q4052	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4053	1-801-806-11	s	TRANSISTOR DTC144EKA
R4001	1-216-667-11	s	RESISTOR,CHIP 4.7K 1/10W(2012)
R4002	1-216-308-00	s	RESISTOR,CHIP 4.7 1/10W(2012)
R4003	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R4004	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R4005	1-216-113-00	s	RESISTOR CHIP 470K 1/10W(2012)
R4006	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R4007	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4008	1-216-081-00	s	RESISTOR,CHIP 22K 1/10W(2012)
R4009	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4010	1-216-148-00	s	RESISTOR,CHIP 8.2 1/8W(3216)
R4011	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4012	1-216-097-00	s	RESISTOR CHIP 100K 1/10W(2012)
R4013	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4014	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4015	1-216-065-91	s	RESISTOR,CHIP 4.7K 1/10W(2012)
R4016	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4017	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4018	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4019	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4020	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4021	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4022	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4023	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4024	1-216-624-11	s	RESISTOR,CHIP 75 1/10W(2012)
R4025	1-216-624-11	s	RESISTOR,CHIP 75 1/10W(2012)
R4026	1-216-624-11	s	RESISTOR,CHIP 75 1/10W(2012)
R4027	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4028	1-216-624-11	s	RESISTOR,CHIP 75 1/10W(2012)
R4029	1-216-624-11	s	RESISTOR,CHIP 75 1/10W(2012)

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Ref. No. or Q'ty	Part No.	SP	Description
R4030	1-216-624-11	s	RESISTOR,CHIP 75 1/10W(2012)
R4031	1-216-641-11	s	RESISTOR,CHIP 390 1/10W(2012)
R4032	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4033	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4034	1-216-624-11	s	RESISTOR,CHIP 75 1/10W(2012)
R4035	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4036	1-216-624-11	s	RESISTOR,CHIP 75 1/10W(2012)
R4037	1-216-624-11	s	RESISTOR,CHIP 75 1/10W(2012)
R4038	1-216-641-11	s	RESISTOR,CHIP 390 1/10W(2012)
R4039	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4040	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R4041	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4042	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4048	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4050	1-218-767-11	s	RESISTOR,CHIP 430K 1/10W(2012)
R4054	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4055	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4056	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4057	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4058	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4059	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4060	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4061	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4062	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4063	1-216-641-11	s	RESISTOR,CHIP 390 1/10W(2012)
R4064	1-216-069-11	s	RESISTOR,CHIP 6.8K 1/10W(2012)
R4065	1-216-641-11	s	RESISTOR,CHIP 390 1/10W(2012)
R4066	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4067	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4068	1-216-065-91	s	RESISTOR,CHIP 4.7K 1/10W(2012)
R4070	1-216-091-00	s	RESISTOR CHIP 56K 1/10W(2012)
R4071	1-216-065-91	s	RESISTOR,CHIP 4.7K 1/10W(2012)
R4072	1-216-065-91	s	RESISTOR,CHIP 4.7K 1/10W(2012)
R4073	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4074	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4075	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4076	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4077	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4078	1-216-065-91	s	RESISTOR,CHIP 4.7K 1/10W(2012)
R4079	1-216-666-11	s	RESISTOR,CHIP 4.3K 1/10W(2012)
R4080	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4081	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4082	1-216-690-11	s	RESISTOR,CHIP 43K 1/10W(2012)
R4083	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4084	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4085	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4086	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4087	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4088	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4089	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4090	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R4092	1-216-631-11	s	RESISTOR,CHIP 150 1/10W (2012)
R4093	1-216-629-11	s	RESISTOR,CHIP 120 1/10W (2012)
R4094	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4096	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4097	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4098	1-216-624-11	s	RESISTOR,CHIP 75 1/10W(2012)
R4100	1-216-624-11	s	RESISTOR,CHIP 75 1/10W(2012)
R4101	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)

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R4103	1-216-624-11	s	RESISTOR,CHIP 75 1/10W(2012)
R4105	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4106	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4107	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4108	1-216-667-11	s	RESISTOR,CHIP 4.7K 1/10W(2012)
R4109	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4110	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4111	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R4112	1-216-081-00	s	RESISTOR,CHIP 22K 1/10W(2012)
R4113	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R4114	1-216-085-00	s	RESISTOR CHIP 33K 1/10W(2012)
R4115	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R4116	1-216-081-00	s	RESISTOR,CHIP 22K 1/10W(2012)
R4117	1-216-667-11	s	RESISTOR,CHIP 4.7K 1/10W(2012)
R4118	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4119	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4120	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R4121	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R4122	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R4123	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4124	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4125	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4126	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4127	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4128	1-218-760-11	s	RESISTOR,CHIP 220K 1/10W(2012)
R4129	1-216-065-91	s	RESISTOR,CHIP 4.7K 1/10W(2012)
R4130	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4131	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4132	1-216-683-11	s	RESISTOR,CHIP 22K 1/10W (2012)
R4133	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4134	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4135	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4136	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4137	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4138	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R4139	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R4140	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4141	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4142	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4143	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4144	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4145	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4146	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4148	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4149	1-216-133-00	s	RESISTOR,CHIP 3.3M 1/10W(2012)
R4150	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4151	1-216-083-00	s	RESISTOR CHIP 27K 1/10W(2012)
R4152	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R4153	1-216-669-11	s	RESISTOR,CHIP 5.6K 1/10W(2012)
R4154	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4155	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4156	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4157	1-216-691-11	s	RESISTOR,CHIP 47K 1/10W(2012)
R4158	1-216-667-11	s	RESISTOR,CHIP 4.7K 1/10W(2012)
R4159	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4160	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4161	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4162	1-216-041-00	s	RESISTOR, CHIP 470 1/10W(2012)
R4164	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)

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R4165	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4166	1-216-041-00	s	RESISTOR, CHIP 470 1/10W(2012)
R4168	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4169	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4170	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4171	1-216-041-00	s	RESISTOR, CHIP 470 1/10W(2012)
R4173	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4174	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4175	1-216-069-11	s	RESISTOR,CHIP 6.8K 1/10W(2012)
R4176	1-216-077-00	s	RESISTOR,CHIP 15K 1/10W(2012)
R4177	1-216-675-11	s	RESISTOR,CHIP 10K 1/10W(2012)
R4178	1-216-675-11	s	RESISTOR,CHIP 10K 1/10W(2012)
R4179	1-216-679-11	s	RESISTOR,CHIP 15K 1/10W (2012)
R4180	1-216-697-91	s	RESISTOR,CHIP 82K 1/10W
R4181	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4182	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4183	1-216-697-91	s	RESISTOR,CHIP 82K 1/10W
R4184	1-216-687-11	s	RESISTOR CHIP 33K 1/10W (2012)
R4185	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4186	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4187	1-216-685-11	s	RESISTOR,CHIP 27K 1/10W(2012)
R4188	1-216-693-11	s	RESISTOR CHIP 56K 1/10W (2012)
R4189	1-216-063-91	s	RESISTOR,CHIP 3.9K 1/10W(2125)
R4190	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4191	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4192	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4193	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4194	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4195	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4196	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4197	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4198	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4199	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4200	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4201	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4202	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4203	1-216-659-11	s	RESISTOR,CHIP 2.2K 1/10W(2012)
R4204	1-216-659-11	s	RESISTOR,CHIP 2.2K 1/10W(2012)
R4205	1-216-659-11	s	RESISTOR,CHIP 2.2K 1/10W(2012)
R4206	1-216-635-11	s	RESISTOR,CHIP 220 1/10W (2012)
R4207	1-216-635-11	s	RESISTOR,CHIP 220 1/10W (2012)
R4208	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4209	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4210	1-216-635-11	s	RESISTOR,CHIP 220 1/10W (2012)
R4211	1-216-045-00	s	RESISTOR,CHIP 680 1/10W(2012)
R4212	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4213	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4214	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4215	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4216	1-216-621-11	s	RESISTOR,CHIP 56 1/10W (2012)
R4217	1-216-621-11	s	RESISTOR,CHIP 56 1/10W (2012)
R4218	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4219	1-216-623-11	s	RESISTOR,CHIP 68 1/10W(2012)
R4220	1-216-623-11	s	RESISTOR,CHIP 68 1/10W(2012)
R4221	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4222	1-216-621-11	s	RESISTOR,CHIP 56 1/10W (2012)
R4223	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4224	1-216-621-11	s	RESISTOR,CHIP 56 1/10W (2012)
R4225	1-216-077-00	s	RESISTOR,CHIP 15K 1/10W(2012)

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Ref. No. or Q'ty	Part No.	SP	Description
R4226	1-216-077-00	s	RESISTOR,CHIP 15K 1/10W(2012)
R4227	1-216-077-00	s	RESISTOR,CHIP 15K 1/10W(2012)
R4228	1-216-621-11	s	RESISTOR,CHIP 56 1/10W (2012)
R4229	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4230	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4231	1-216-621-11	s	RESISTOR,CHIP 56 1/10W (2012)
R4232	1-216-624-11	s	RESISTOR,CHIP 75 1/10W(2012)
R4233	1-216-624-11	s	RESISTOR,CHIP 75 1/10W(2012)
R4234	1-216-621-11	s	RESISTOR,CHIP 56 1/10W (2012)
R4235	1-216-621-11	s	RESISTOR,CHIP 56 1/10W (2012)
R4236	1-216-113-00	s	RESISTOR CHIP 470K 1/10W(2012)
R4237	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4238	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4239	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4240	1-216-081-00	s	RESISTOR,CHIP 22K 1/10W(2012)
R4241	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4242	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4243	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4244	1-216-033-00	s	RESISTOR,CHIP 220 1/10W(2012)
R4245	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4246	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4247	1-216-061-00	s	RESISTOR CHIP 3.3K 1/10W(2012)
R4248	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4249	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4250	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4251	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4252	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4253	1-216-062-00	s	RESISTOR,CHIP 3.6K 1/10W(2012)
R4255	1-216-041-00	s	RESISTOR, CHIP 470 1/10W(2012)
R4256	1-216-113-00	s	RESISTOR CHIP 470K 1/10W(2012)
R4257	1-216-651-11	s	RESISTOR,CHIP 1K 1/10W(2012)
R4259	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4260	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4261	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4262	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4266	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4268	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4269	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4270	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4273	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4274	1-216-646-11	s	RESISTOR,CHIP 620 1/10W (2012)
R4275	1-216-635-11	s	RESISTOR,CHIP 220 1/10W (2012)
R4276	1-216-035-00	s	RESISTOR, CHIP 270 1/10W(2012)
R4277	1-216-663-11	s	RESISTOR,CHIP 3.3K 1/10W(2012)
R4278	1-216-635-11	s	RESISTOR,CHIP 220 1/10W (2012)
R4279	1-216-635-11	s	RESISTOR,CHIP 220 1/10W (2012)
R4280	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4281	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R4282	1-216-061-00	s	RESISTOR CHIP 3.3K 1/10W(2012)
R4283	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4284	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4285	1-216-047-91	s	RESISTOR, CHIP 820 1/10W(2125)
R4286	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R4287	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4288	1-216-061-00	s	RESISTOR CHIP 3.3K 1/10W(2012)
R4289	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4290	1-216-117-00	s	RESISTOR,CHIP 680K 1/10W(2012)
R4291	1-216-066-00	s	RESISTOR,CHIP 5.1K 1/10W(2012)
R4292	1-216-117-00	s	RESISTOR,CHIP 680K 1/10W(2012)

(Q BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R4294	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4295	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R4296	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R4297	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R4298	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4299	1-216-061-00	s	RESISTOR CHIP 3.3K 1/10W(2012)
R4300	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4301	1-216-061-00	s	RESISTOR CHIP 3.3K 1/10W(2012)
R4302	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4303	1-216-061-00	s	RESISTOR CHIP 3.3K 1/10W(2012)
R4304	1-216-669-11	s	RESISTOR,CHIP 5.6K 1/10W(2012)
R4305	1-216-669-11	s	RESISTOR,CHIP 5.6K 1/10W(2012)
R4306	1-216-669-11	s	RESISTOR,CHIP 5.6K 1/10W(2012)
R4307	1-216-645-11	s	RESISTOR,CHIP 560 1/10W(2012)
R4308	1-216-645-11	s	RESISTOR,CHIP 560 1/10W(2012)
R4309	1-216-645-11	s	RESISTOR,CHIP 560 1/10W(2012)
R4310	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4311	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4312	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4313	1-216-033-00	s	RESISTOR,CHIP 220 1/10W(2012)
R4314	1-216-037-00	s	RESISTOR,CHIP 330 1/10W(2012)
R4315	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4316	1-216-085-00	s	RESISTOR CHIP 33K 1/10W(2012)
R4317	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4318	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4319	1-216-041-00	s	RESISTOR, CHIP 470 1/10W(2012)
R4320	1-216-047-91	s	RESISTOR, CHIP 820 1/10W(2125)
R4321	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4322	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4323	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4324	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4325	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4326	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4327	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4328	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4329	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4332	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4333	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4334	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R4346	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4347	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4348	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4349	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4350	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R4351	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R4352	1-216-041-00	s	RESISTOR, CHIP 470 1/10W(2012)
R4353	1-216-099-00	s	RESISTOR,CHIP 120K 1/10W(2012)
R4354	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R4355	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4356	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4357	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R4358	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R4359	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4360	1-216-095-00	s	RESISTOR, CHIP 82K 1/10W(2012)
R4361	1-216-097-00	s	RESISTOR CHIP 100K 1/10W(2012)
R4362	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R4363	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R4364	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4365	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)

(Q BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R4366	1-216-653-11	s	RESISTOR,CHIP 1.2K 1/10W(2012)
R4367	1-216-639-11	s	RESISTOR,CHIP 330 1/10W (2012)
R4368	1-216-653-11	s	RESISTOR,CHIP 1.2K 1/10W(2012)
R4369	1-216-639-11	s	RESISTOR,CHIP 330 1/10W (2012)
R4370	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4371	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R4374	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4375	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4376	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4377	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R4378	1-216-001-00	s	RESISTOR, CHIP 10 1/10W(2012)
R4379	1-216-001-00	s	RESISTOR, CHIP 10 1/10W(2012)
R4380	1-216-001-00	s	RESISTOR, CHIP 10 1/10W(2012)
R4381	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4382	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4383	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R4385	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R4387	1-216-864-11	s	CONDUCTOR, CHIP (1608)
RY4001	1-755-384-21	s	RELAY
RY4002	1-755-384-21	s	RELAY
RY4003	1-755-384-21	s	RELAY
RY4004	1-755-384-21	s	RELAY
TH4001	9-910-999-31	s	SUPPLY END

F BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-1241-397-A	o	MOUNTED CIRCUIT BOARD, F
2pcs	1-533-223-11	s	CLIP,FUSE
1pc	1-801-268-11	s	VARISTOR (TNR14V471K660)
4pcs	4-374-846-01	o	COVER,CAPACITOR,CAP TYPE
C2500 ⚠	1-113-912-11	s	CAPACITOR,CERAMIC .0047MF/250V
C2501 ⚠	1-113-912-11	s	CAPACITOR,CERAMIC .0047MF/250V
C2502 ⚠	1-107-533-11	s	CAPASITOR FILM 1MF/250VAC
C2503 ⚠	1-113-512-11	s	CAPACITOR, FILM 0.68MF/275VAC
C2504 ⚠	1-113-912-11	s	CAPACITOR,CERAMIC .0047MF/250V
C2505 ⚠	1-113-912-11	s	CAPACITOR,CERAMIC .0047MF/250V
CN2501	1-691-960-11	o	PIN,CONNECTOR (PC BOARD) 3P
CN2502	1-695-915-11	s	TAB (CONTACT)
CN2503	1-691-960-21	o	PIN, CONNECTOR (PC BOARD) 3P
F2500 ⚠	1-576-233-11	s	FUSE (H.B.C.) 6.3A/250V
L2500 ⚠	1-419-988-11	s	COIL, CHOKE
R2500 ⚠	1-202-847-00	s	RESISTOR,SOLID 560K 1/2W
R2501 ⚠	1-202-847-00	s	RESISTOR,SOLID 560K 1/2W
VD2500 ⚠	1-801-268-11	s	VARISTOR TNR14V471K660

B BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-1136-209-A	s	MOUNTED CIRCUIT BOARD, B
C3001	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3002	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3003	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3004	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3006	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3007	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C3008	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C3009	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C3011	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3012	1-128-008-11	s	CAPACITOR ERECT 3,3MF/35V
C3013	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3014	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3015	1-107-823-11	s	CAPACITOR,CERAMIC 0.47MF/16V
C3016	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C3017	1-107-682-11	s	CAPACITOR,CHIP 1MF/16V (3216)
C3018	1-163-037-11	s	CAPACITOR,CHIP CERAMIC 0.022MF
C3020	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C3021	1-107-682-11	s	CAPACITOR,CHIP 1MF/16V (3216)
C3022	1-126-601-11	s	CAPACITOR,ELECT 2.2MF/50V
C3023	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C3024	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3025	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3026	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C3027	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C3028	1-127-820-11	s	CAPACITOR, SQUARE CHIP 4.7MF
C3029	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3030	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3031	1-163-227-11	s	CAPACITOR CERAMIC 10PF/50V(CH)
C3032	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C3033	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3034	1-125-898-11	s	CAPACITOR, CERAMIC 0.22MF 50V
C3035	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C3036	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C3038	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C3039	1-107-682-11	s	CAPACITOR,CHIP 1MF/16V (3216)
C3040	1-107-682-11	s	CAPACITOR,CHIP 1MF/16V (3216)
C3041	1-107-682-11	s	CAPACITOR,CHIP 1MF/16V (3216)
C3042	1-127-820-11	s	CAPACITOR, SQUARE CHIP 4.7MF
C3043	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3044	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3045	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3046	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C3047	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C3048	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C3049	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C3050	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C3051	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C3052	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3053	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3054	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3055	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3056	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C3057	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C3059	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3060	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C3061	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3062	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C3063	1-165-979-11	s	CAPACITOR,ELECT 100M/6.3
C3064	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3065	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3066	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3067	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3068	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3069	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3070	1-100-354-21	s	CAPACITOR, ELECT 220MF/16V
C3071	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3072	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3073	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3074	1-126-205-11	s	CAPACITOR,ELECT 47M/6.3
C3075	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C3076	1-163-237-11	s	CAPACITOR CERAMIC 27PF/50V
C3077	1-163-237-11	s	CAPACITOR CERAMIC 27PF/50V
C3078	1-163-245-11	s	CAPACITOR CERAMIC 56PF/50V
C3079	1-163-245-11	s	CAPACITOR CERAMIC 56PF/50V
C3080	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C3081	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C3082	1-126-204-11	s	CAPACITOR, ELECT 47MF/16V(CHIP
C3084	1-163-235-11	s	CAPACITOR,CHIP CERAMIC22PF/50V
C3085	1-163-245-11	s	CAPACITOR CERAMIC 56PF/50V
C3086	1-163-235-11	s	CAPACITOR,CHIP CERAMIC22PF/50V
C3087	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3088	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3089	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3090	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3091	1-163-131-00	s	CAPACITOR,CHIP CERAMIC 390PF
C3092	1-164-161-11	s	CAPACITOR, CERAMIC 2200PF/100V
C3093	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3094	1-163-229-11	s	CAPACITOR CHIP 12PF/50V(2125)
C3095	1-163-229-11	s	CAPACITOR CHIP 12PF/50V(2125)
C3096	1-163-229-11	s	CAPACITOR CHIP 12PF/50V(2125)
C3097	1-163-229-11	s	CAPACITOR CHIP 12PF/50V(2125)
C3098	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3099	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3100	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3101	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3102	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3103	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3104	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3105	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3106	1-216-295-91	s	CONDUCTOR, CHIP (2012)
C3108	1-128-013-11	s	CAPACITOR ERECT 1MF/50V
C3112	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3117	1-163-251-11	s	CAPACITOR CERAMIC 100PF/50V
C3124	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3125	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3126	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3127	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3128	1-164-161-11	s	CAPACITOR, CERAMIC 2200PF/100V
C3129	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3130	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3131	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3132	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3133	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3134	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C3135	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3136	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C3137	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3138	1-128-396-11	s	CAPACITOR,ELECT 470MF/10V CHIP
C3140	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3141	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3142	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C3144	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3145	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C3147	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
C3149	1-163-133-00	s	CAPACITOR,CHIP CERAMIC 470PF
C3150	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3151	1-128-013-11	s	CAPACITOR ERECT 1MF/50V
C3152	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3153	1-163-227-11	s	CAPACITOR CERAMIC 10PF/50V(CH)
C3154	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C3155	1-163-231-11	s	CAPACITOR,CHIP CERAMIC15PF/50V
C3156	1-163-021-91	s	CAPACITOR, CERAMIC 0.01MF/50V
C3157	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3158	1-164-004-11	s	CAPACITOR,CERAMIC 0.1MF/25V
C3159	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3160	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3161	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3162	1-117-681-11	s	CAPACITOR, ELECT 100MF/16V
C3163	1-128-004-11	s	CAPACITOR ELECT 10MF/16V(CHIP)
CN3001	1-778-373-11	o	PIN, CONNECTOR (PC BOARD)
CN3002	1-778-373-11	o	PIN, CONNECTOR (PC BOARD)
D3001	8-719-914-43	s	DIODE DAN202K
FB3001	1-414-753-91	s	INDUCTOR 4.7UH
FB3002	1-543-775-11	s	BEAD, FERRITE
FB3003	1-543-775-11	s	BEAD, FERRITE
FB3004	1-543-775-11	s	BEAD, FERRITE
FB3005	1-414-753-91	s	INDUCTOR 4.7UH
FB3006	1-414-753-91	s	INDUCTOR 4.7UH
FB3007	1-414-234-11	s	INDUCTOR,FERRITE BEAD
FB3008	1-414-234-11	s	INDUCTOR,FERRITE BEAD
FB3009	1-414-234-11	s	INDUCTOR,FERRITE BEAD
FB3010	1-414-234-11	s	INDUCTOR,FERRITE BEAD
FL3001	1-233-736-21	s	FILTER, EMI
FL3002	1-233-736-21	s	FILTER, EMI
FL3003	1-233-736-21	s	FILTER, EMI
FL3004	1-233-736-21	s	FILTER, EMI
FL3005	1-233-736-21	s	FILTER, EMI
FL3006	1-233-736-21	s	FILTER, EMI
FL3007	1-239-289-11	s	FILTER, LOW PASS
FL3008	1-239-289-11	s	FILTER, LOW PASS
FL3009	1-239-847-11	s	FILTER, LOW PASS
IC3001	8-759-460-72	s	IC BA033FP
IC3002	8-759-533-85	s	IC L88M05T-FA-TL
IC3004	8-759-533-85	s	IC L88M05T-FA-TL
IC3005	8-759-524-25	o	IC TC7WH241FU(TE12R)
IC3006	8-752-094-47	s	IC CXA2123AQ-T6
IC3007	8-759-353-02	s	IC NJM2533M (TE2)
IC3008	8-759-353-02	s	IC NJM2533M (TE2)
IC3010	8-759-436-89	s	IC MC141627FT
IC3011	8-759-269-92	s	IC SN74HCU04ANS (E20)
IC3012	8-759-568-27	s	IC MSM514265C-60JSDR1
IC3014	8-759-594-44	s	IC UPD64082GF-3BA
IC3015	8-759-242-72	s	IC TC7W00F

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
L3001	1-412-533-21	s	MICRO INDUCTOR 47UH
L3002	1-412-533-21	s	MICRO INDUCTOR 47UH
L3004	1-412-533-21	s	MICRO INDUCTOR 47UH
L3005	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L3006	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L3007	1-410-389-31	s	INDUCTOR,CHIP 47UH (3225)
L3009	1-410-383-31	s	INDUCTOR,CHIP 15UH (3225)
L3010	1-410-383-31	s	INDUCTOR,CHIP 15UH (3225)
L3011	1-410-389-31	s	INDUCTOR,CHIP 47UH (3225)
L3012	1-410-389-31	s	INDUCTOR,CHIP 47UH (3225)
L3013	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L3014	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L3015	1-410-200-31	s	CHIP INDUCTOR
L3016	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L3019	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L3020	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L3021	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L3022	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L3023	1-412-058-11	s	INDUCTOR,SMALL TYPE 10UH
L3024	1-412-533-21	s	MICRO INDUCTOR 47UH
L3026	1-412-533-21	s	MICRO INDUCTOR 47UH
Q3001	1-801-806-11	s	TRANSISTOR DTC144EKA
Q3002	8-729-107-31	s	TRANSISTOR 2SC3545
Q3003	8-729-107-31	s	TRANSISTOR 2SC3545
Q3004	8-729-107-31	s	TRANSISTOR 2SC3545
Q3005	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3006	8-729-101-07	s	TRANSISTOR 2SB798
Q3007	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3008	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3009	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3010	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q3011	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q3012	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q3013	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3014	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3015	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3016	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3017	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3018	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q3019	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q3020	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3021	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3022	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3023	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q3024	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3025	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3026	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3027	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q3028	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3029	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q3030	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q3031	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q3032	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3033	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3034	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q3035	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q3036	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q3037	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
Q3038	8-729-026-49	s	TRANSISTOR 2SA1037AK-T146-R
Q3039	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3040	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3041	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3042	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3043	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
R3001	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R3002	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3003	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R3004	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R3005	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R3006	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R3007	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R3008	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R3009	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R3010	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R3011	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R3012	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R3013	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R3014	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R3015	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R3016	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R3018	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R3019	1-216-685-11	s	RESISTOR,CHIP 27K 1/10W(2012)
R3020	1-208-796-11	s	RESISTOR,CHIP 3.9K 1/10W(2012)
R3021	1-216-651-11	s	RESISTOR,CHIP 1K 1/10W(2012)
R3022	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R3023	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3024	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R3025	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R3026	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3027	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3028	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3029	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R3030	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R3031	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R3032	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R3033	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R3034	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R3035	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R3036	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R3037	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R3038	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R3039	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R3040	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R3041	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R3042	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R3043	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R3044	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R3050	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3051	1-216-620-11	s	RESISTOR CHIP 51 1/10W (2012)
R3052	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3053	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3054	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3055	1-216-690-11	s	RESISTOR,CHIP 43K 1/10W(2012)
R3056	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3057	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3058	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R3059	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3060	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3061	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3062	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3063	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R3064	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3065	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3066	1-216-033-00	s	RESISTOR,CHIP 220 1/10W(2012)
R3067	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3068	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3069	1-216-051-00	s	RESISTOR,CHIP 1.2K 1/10W(2012)
R3070	1-216-061-00	s	RESISTOR CHIP 3.3K 1/10W(2012)
R3071	1-216-644-11	s	RESISTOR,CHIP 510 1/10W (2012)
R3072	1-216-061-00	s	RESISTOR CHIP 3.3K 1/10W(2012)
R3073	1-216-644-11	s	RESISTOR,CHIP 510 1/10W (2012)
R3074	1-216-033-00	s	RESISTOR,CHIP 220 1/10W(2012)
R3076	1-216-081-00	s	RESISTOR,CHIP 22K 1/10W(2012)
R3077	1-216-682-11	s	RESISTOR,CHIP 20K 1/10W (2012)
R3078	1-216-081-00	s	RESISTOR,CHIP 22K 1/10W(2012)
R3079	1-216-682-11	s	RESISTOR,CHIP 20K 1/10W (2012)
R3080	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R3081	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R3082	1-216-035-00	s	RESISTOR, CHIP 270 1/10W(2012)
R3083	1-216-035-00	s	RESISTOR, CHIP 270 1/10W(2012)
R3084	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R3085	1-216-047-91	s	RESISTOR, CHIP 820 1/10W(2125)
R3086	1-216-041-00	s	RESISTOR, CHIP 470 1/10W(2012)
R3087	1-216-047-91	s	RESISTOR, CHIP 820 1/10W(2125)
R3088	1-216-033-00	s	RESISTOR,CHIP 220 1/10W(2012)
R3089	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R3090	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R3091	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R3092	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3093	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3094	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3095	1-216-678-11	s	RESISTOR,CHIP 13K 1/10W(2012)
R3096	1-216-077-00	s	RESISTOR,CHIP 15K 1/10W(2012)
R3098	1-216-121-00	s	RESISTOR CHIP 1M 1/10W(2012)
R3099	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R3102	1-216-053-00	s	RESISTOR CHIP 1.5K 1/10W(2012)
R3103	1-216-041-00	s	RESISTOR, CHIP 470 1/10W(2012)
R3104	1-216-055-00	s	RESISTOR CHIP 1.8K 1/10W(2012)
R3105	1-216-055-00	s	RESISTOR CHIP 1.8K 1/10W(2012)
R3106	1-216-055-00	s	RESISTOR CHIP 1.8K 1/10W(2012)
R3107	1-216-055-00	s	RESISTOR CHIP 1.8K 1/10W(2012)
R3108	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R3109	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3110	1-216-073-00	s	RESISTOR,CHIP 10K 1/10W(2012)
R3111	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3119	1-216-623-11	s	RESISTOR,CHIP 68 1/10W(2012)
R3121	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R3128	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R3130	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R3131	1-216-065-91	s	RESISTOR,CHIP 4.7K 1/10W(2012)
R3132	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R3134	1-216-651-11	s	RESISTOR,CHIP 1K 1/10W(2012)
R3135	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R3136	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R3137	1-216-041-00	s	RESISTOR, CHIP 470 1/10W(2012)

(B BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R3138	1-216-651-11	s	RESISTOR,CHIP 1K 1/10W(2012)
R3139	1-216-659-11	s	RESISTOR,CHIP 2.2K 1/10W(2012)
R3140	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R3141	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R3142	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R3143	1-216-071-00	s	RESISTOR,CHIP 8.2K 1/10W(2012)
R3144	1-216-105-91	s	RESISTOR,CHIP 220K 1/10W(2125)
R3145	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3147	1-216-033-00	s	RESISTOR,CHIP 220 1/10W(2012)
R3148	1-216-651-11	s	RESISTOR,CHIP 1K 1/10W(2012)
R3149	1-216-651-11	s	RESISTOR,CHIP 1K 1/10W(2012)
R3150	1-216-666-11	s	RESISTOR,CHIP 4.3K 1/10W(2012)
R3151	1-216-065-91	s	RESISTOR,CHIP 4.7K 1/10W(2012)
R3152	1-216-666-11	s	RESISTOR,CHIP 4.3K 1/10W(2012)
R3153	1-216-051-00	s	RESISTOR,CHIP 1.2K 1/10W(2012)
R3154	1-216-065-91	s	RESISTOR,CHIP 4.7K 1/10W(2012)
R3155	1-216-051-00	s	RESISTOR,CHIP 1.2K 1/10W(2012)
R3156	1-216-671-11	s	RESISTOR,CHIP 6.8K 1/10W(2012)
R3157	1-216-663-11	s	RESISTOR,CHIP 3.3K 1/10W(2012)
R3158	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R3159	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R3160	1-216-645-11	s	RESISTOR,CHIP 560 1/10W(2012)
R3161	1-216-647-11	s	RESISTOR,CHIP 680 1/10W (2012)
R3162	1-216-057-00	s	RESISTOR CHIP 2.2K 1/10W(2012)
R3163	1-216-669-11	s	RESISTOR,CHIP 5.6K 1/10W(2012)
R3164	1-216-295-91	s	CONDUCTOR, CHIP (2012)
R3165	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3166	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3167	1-216-065-91	s	RESISTOR,CHIP 4.7K 1/10W(2012)
R3168	1-216-097-00	s	RESISTOR CHIP 100K 1/10W(2012)
R3169	1-216-065-91	s	RESISTOR,CHIP 4.7K 1/10W(2012)
R3170	1-216-097-00	s	RESISTOR CHIP 100K 1/10W(2012)
R3171	1-216-645-11	s	RESISTOR,CHIP 560 1/10W(2012)
R3172	1-216-059-00	s	RESISTOR,CHIP 2.7K 1/10W(2012)
R3173	1-216-059-00	s	RESISTOR,CHIP 2.7K 1/10W(2012)
R3174	1-216-049-11	s	RESISTOR, CHIP 1K 1/10W(2012)
R3175	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R3176	1-216-017-91	s	RESISTOR, CHIP 47 1/10W(2012)
R3177	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3178	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3179	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3180	1-216-025-00	s	RESISTOR,CHIP 100 1/10W(2012)
R3181	1-216-672-11	s	RESISTOR,CHIP 7.5K 1/10W(2012)
R3182	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R3183	1-216-089-91	s	RESISTOR, CHIP 47K 1/10W(2012)
R3187	1-216-117-00	s	RESISTOR,CHIP 680K 1/10W(2012)
R3188	1-216-117-00	s	RESISTOR,CHIP 680K 1/10W(2012)
X3001	1-781-612-21	s	VIBRATOR, CRYSTAL
X3002	1-767-606-11	s	VIBRATOR, CRYSTAL

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BM BOARD
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 Ref. No.
 or Q'ty  Part No.    SP Description

 1pc      A-1131-792-A s MOUNTED CIRCUIT BOARD, BM

 C1007    1-117-681-11 s CAPACITOR, ELECT 100MF/16V
 C1008    1-117-681-11 s CAPACITOR, ELECT 100MF/16V
 C1009    1-117-681-11 s CAPACITOR, ELECT 100MF/16V
 C1010    1-117-681-11 s CAPACITOR, ELECT 100MF/16V
 C1011    1-128-401-11 s CAPACITOR,ELECT100MF/25V(CHIP)

 CN1001   1-779-004-11 o HOUSING, CONNECTOR
 CN1002   1-779-004-11 o HOUSING, CONNECTOR
 CN1003   1-779-004-11 o HOUSING, CONNECTOR
 CN1004   1-779-004-11 o HOUSING, CONNECTOR
 CN1005   1-779-004-11 o HOUSING, CONNECTOR

 CN1006   1-564-523-11 o PLUG,CONNECTOR (8P)(L-TYPE)
 CN1007   1-564-526-11 o PLUG,CONNCTOR (11P)(L-TYPE)
 CN1008   1-564-521-11 s PLUG,CONNECTOR (6P)(L-TYPE)
 CN1009   1-695-915-11 s TAB (CONTACT)

 IC1007   8-759-460-79 s IC BA09FP-E2
 IC1008   8-759-533-85 s IC L88M05T-FA-TL
 IC1009   8-759-460-81 s IC BA12FP-E2

 L1007    1-412-533-21 s MICRO INDUCTOR 47UH
 L1008    1-412-533-21 s MICRO INDUCTOR 47UH

 R1003    1-216-864-11 s CONDUCTOR, CHIP (1608)
 R1004    1-216-864-11 s CONDUCTOR, CHIP (1608)
 R1007    1-216-355-11 s RESISTOR,METAL FILM 3.3/1W
 R1008    1-216-371-00 s RESISTOR,METAL FILM 1.5/2W
 R1009    1-240-251-11 s RESISTOR,CEMENT 6.8/10W
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5-4. Packing Materials

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PACKING MATERIALS & SUPPLIED ACCESSORIES
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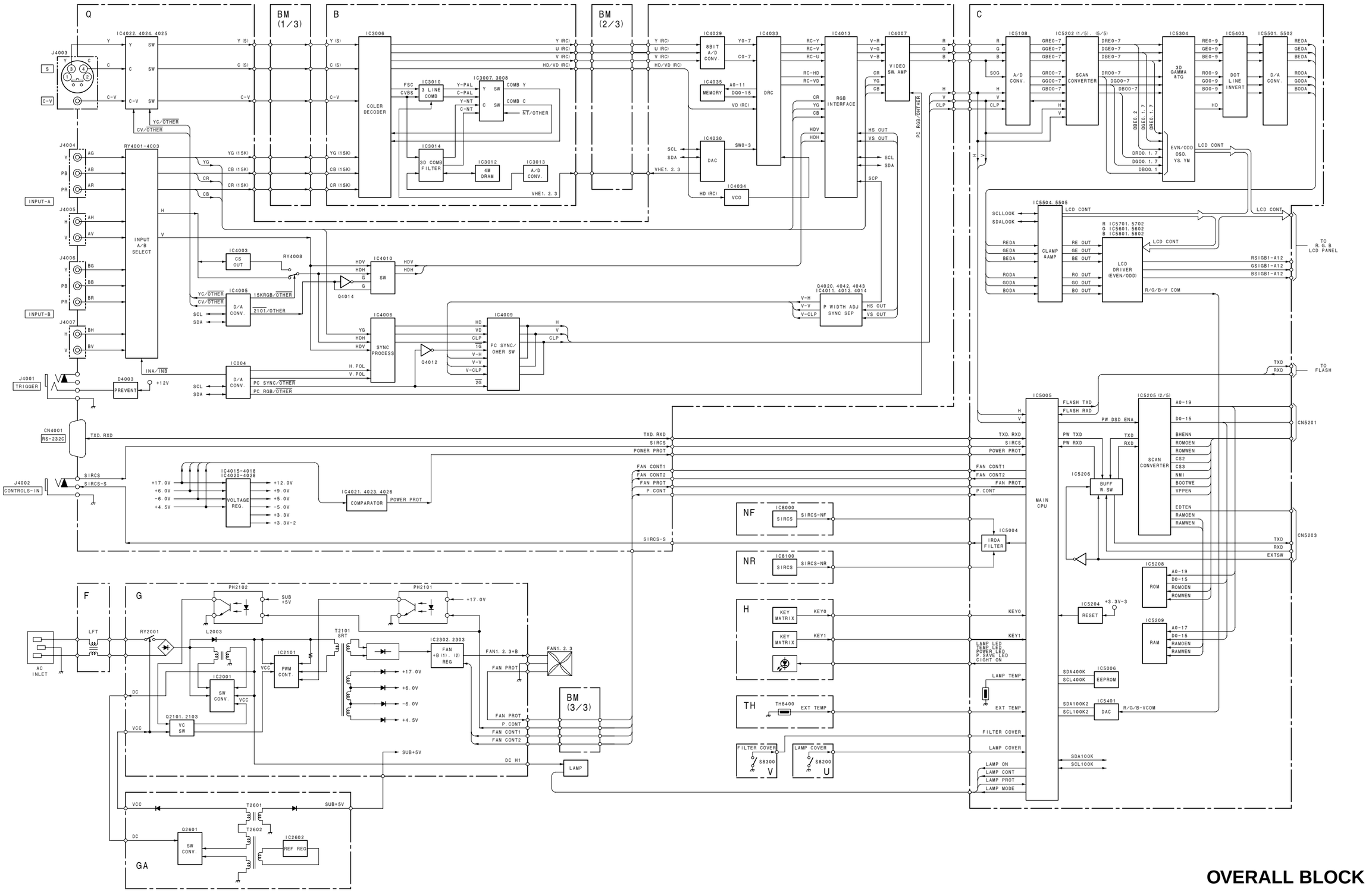
 Ref. No.
 or Q'ty  Part No.    SP Description

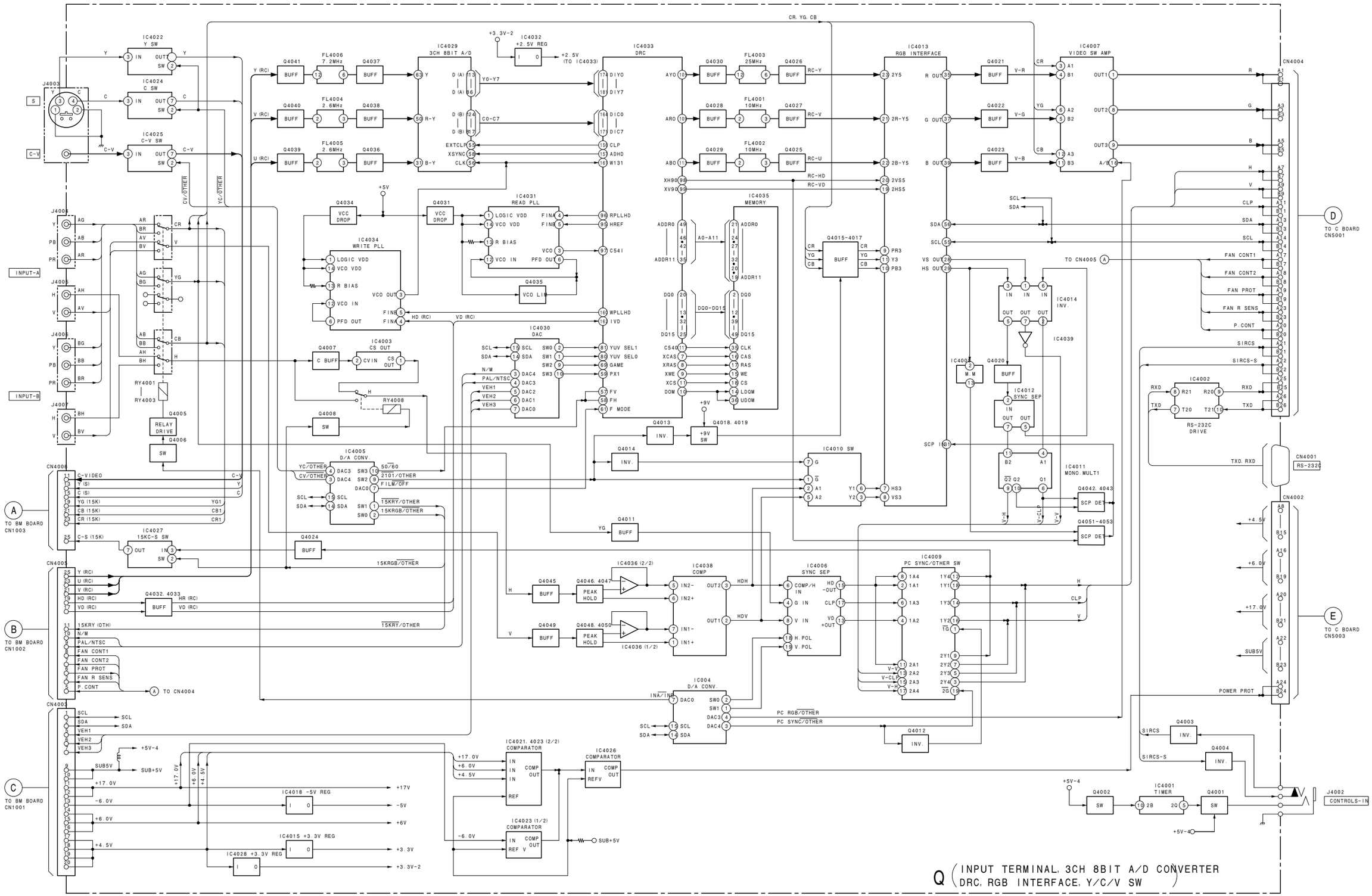
 1pc      3-704-356-01 o SHEET (STANDARD), PROTECTION
 1pc      1-418-834-11 s REMOTE COMMANDER  (RM-PJVW10)
 1pc      9-885-000-82 s BATTERY COVER (FOR RM-PJVW10)
 1pc      4-090-454-01 s OPERATING INSTRUCTION
                           (JAPANESE, SIMPLIFIED CHINESE)
 1pc      4-090-454-11 s OPERATING INSTRUCTION
                           (ENGLISH, FRENCH, SPANISH)

 1pc      4-090-454-21 s OPERATING INSTRUCTION
                           (GERMAN, ITALIAN)
 1pc      4-090-456-01 s FILTER,LENS
 1pc      4-090-460-02 s PACK(GAMMA), CD-ROM
 1pc      X-4039-313-2 s FILTER ASSY
 1pc    ⚠ 1-783-795-62 s CORD, POWER (7A/125V)(FOR J)
```

Section 6
Block Diagrams

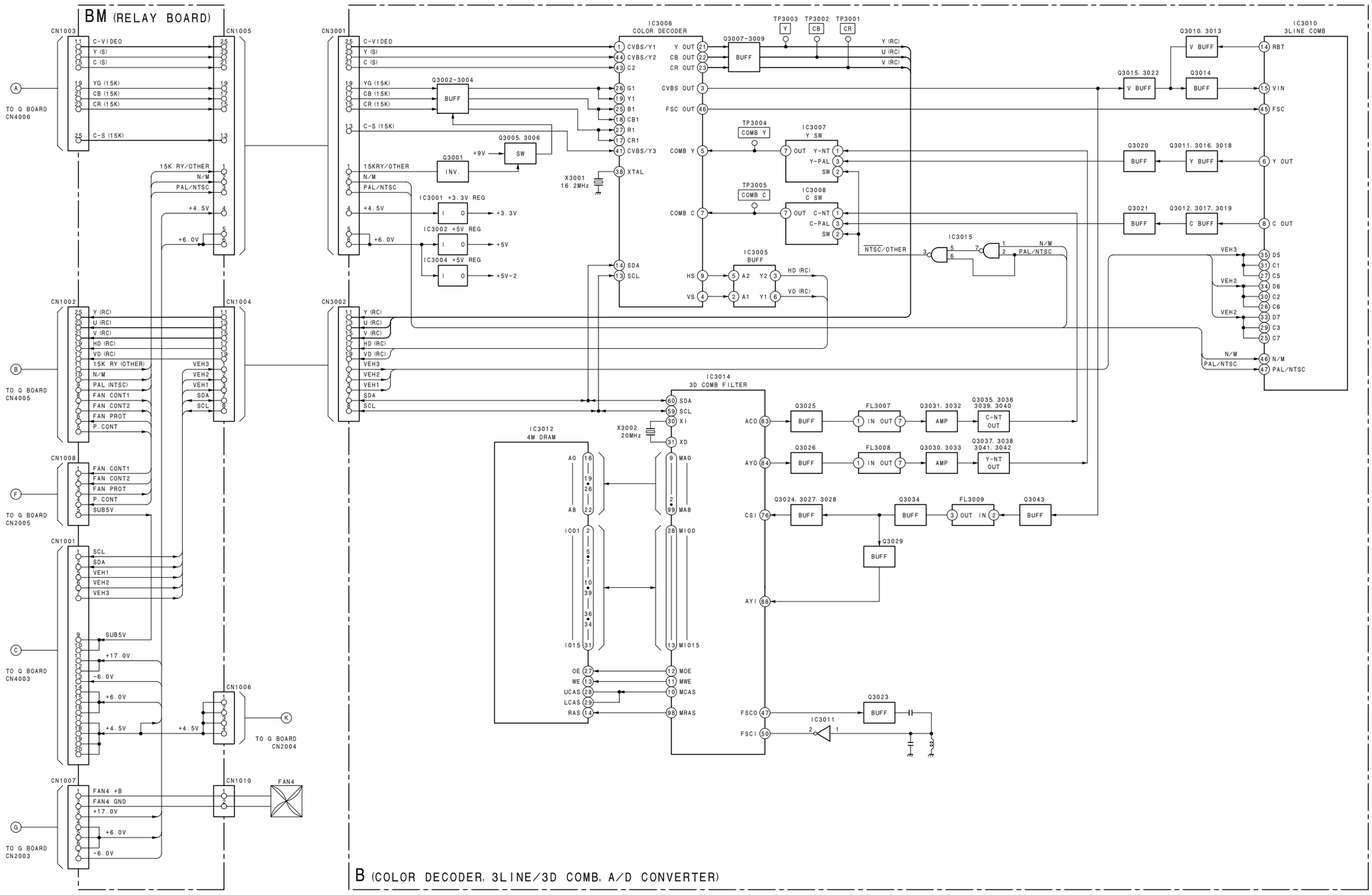


OVERALL BLOCK



Q BLOCK

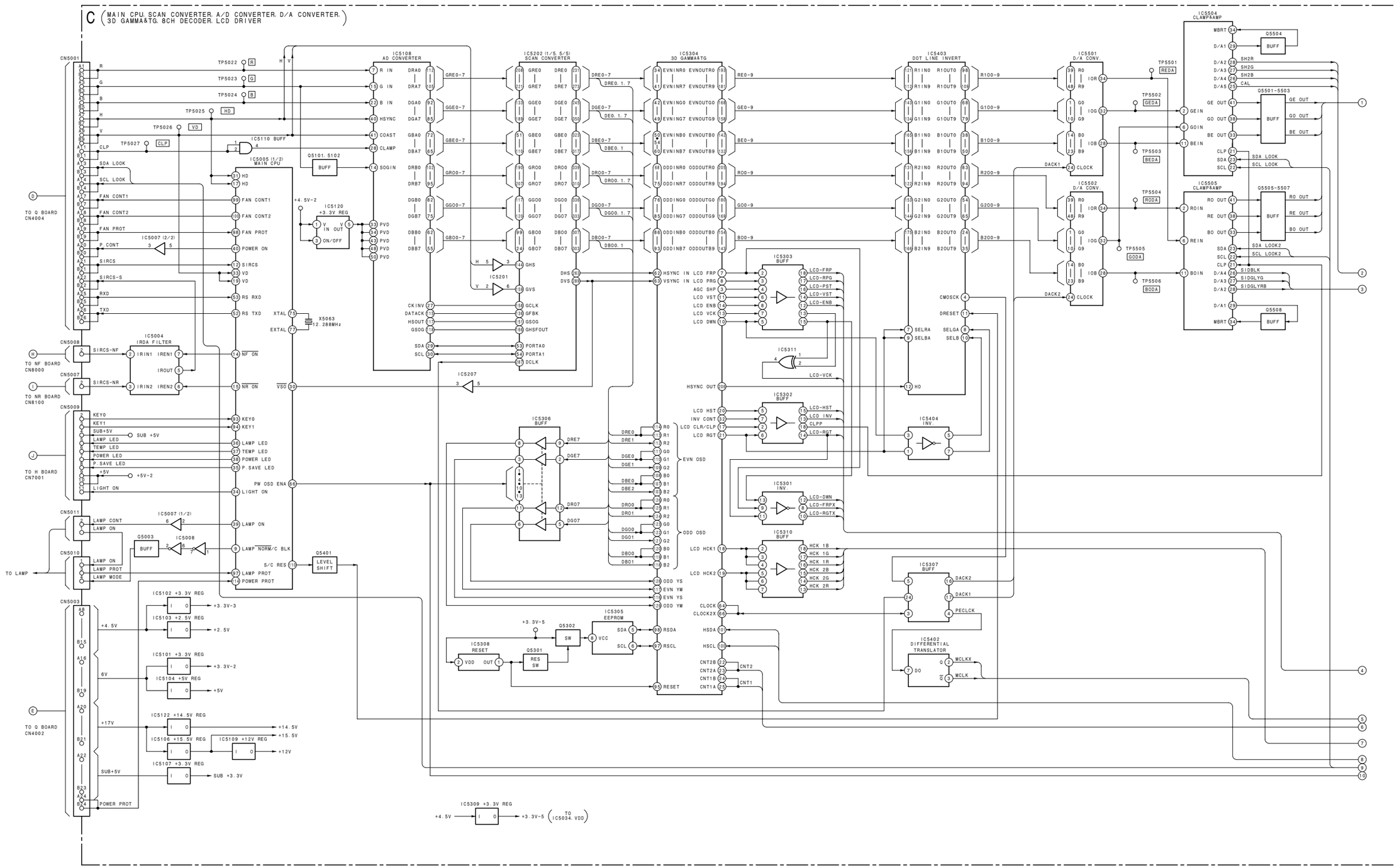
VPL-VW12HT

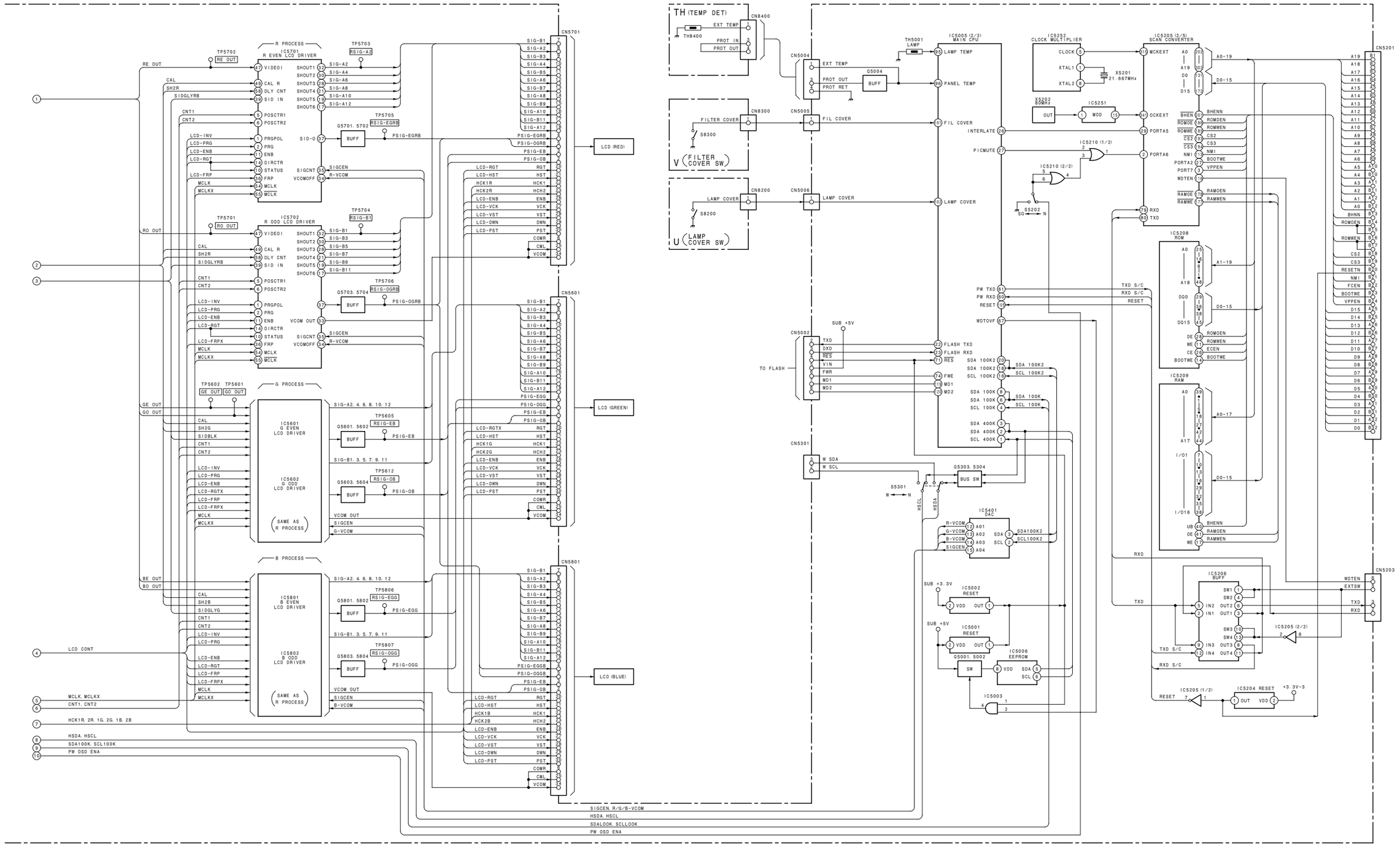


B (COLOR DECODER, 3LINE/3D COMB, A/D CONVERTER)

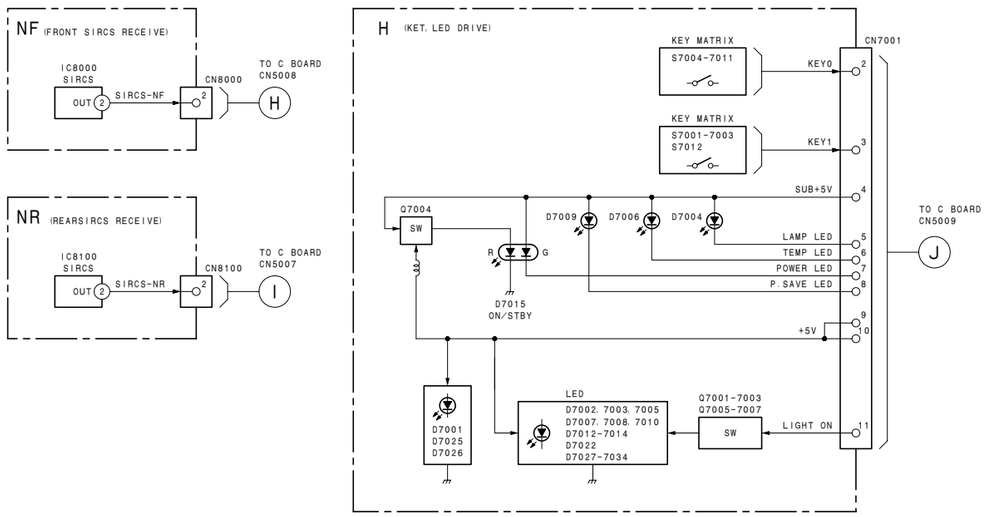
B, BM BLOCK

C (MAIN CPU. SCAN CONVERTER. A/D CONVERTER. D/A CONVERTER. 3D GAMMA&TG. 8CH DECODER. LCD DRIVER)

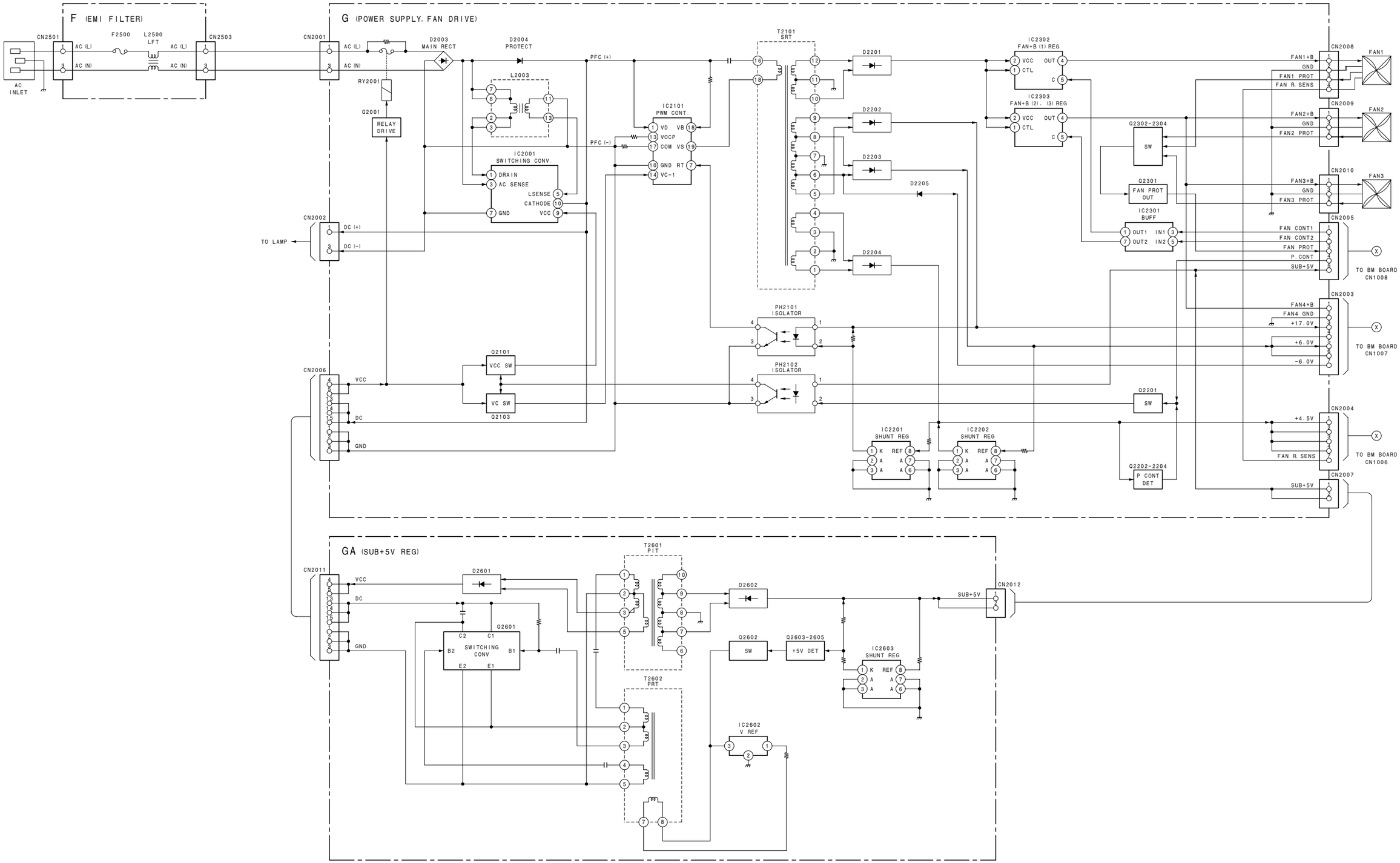



R PROCESS
IC5701 R EVEN LCD DRIVER
IC5702 R ODD LCD DRIVER
G PROCESS
IC5601 G EVEN LCD DRIVER
IC5602 G ODD LCD DRIVER
B PROCESS
IC5801 B EVEN LCD DRIVER
IC5802 B ODD LCD DRIVER
SAME AS R PROCESS
BUFF
CN5701
CN5601
CN5801
LCD (RED)
LCD (GREEN)
LCD (BLUE)
TH (TEMP DET)
V (FILTER COVER SW)
U (LAMP COVER SW)
IC5005 (2/2) MAIN CPU
IC5252 CLOCK MULTIPLIER
IC5205 (2/5) SCAN CONVERTER
IC5208 ROM
IC5209 RAM
IC5206 BUFF
IC5210 (1/2)
IC5210 (2/2)
IC5251
IC5002 RESET
IC5001 RESET
IC5006 EEPROM
IC5003
IC5205 (1/2)
IC5204 RESET
IC5401 DAC
CN5201
CN5203
SIGCEN. R/G/B-VCOM
HSDA. HSCL
SDALOOK. SCLLOOK
PW OSD ENA

C, TH, U, V BLOCK


NF (FRONT SIRCS RECEIVE)
IC8000
SIRCS
OUT
SIRCS-NF
CN8000
TO C BOARD
CN5008
H
NR (REARSIRCS RECEIVE)
IC8100
SIRCS
OUT
SIRCS-NR
CN8100
TO C BOARD
CN5007
I
H (KET. LED DRIVE)
KEY MATRIX
S7004-7011
KEY0
KEY MATRIX
S7001-7003
S7012
KEY1
SUB+5V
Q7004
SW
D7009
D7006
D7004
LAMP LED
TEMP LED
POWER LED
P.SAVE LED
R
G
D7015
ON/STBY
+5V
CN7001
TO C BOARD
CN5009
J
D7001
D7025
D7026
LED
D7002. 7003. 7005
D7007. 7008. 7010
D7012-7014
D7022
D7027-7034
Q7001~7003
Q7005-7007
SW
LIGHT ON

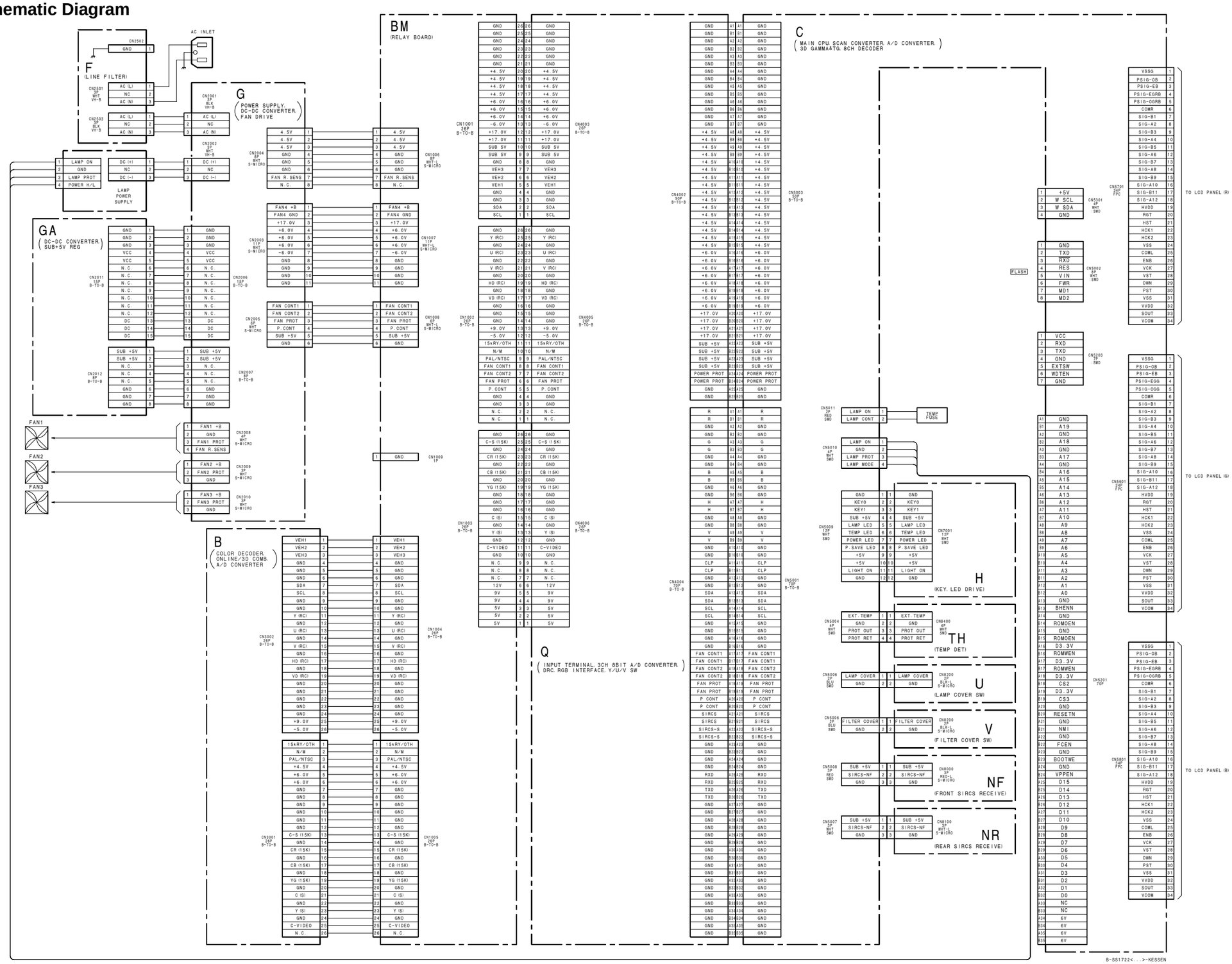
H, NF, NR BLOCK


F (EMI FILTER)
G (POWER SUPPLY, FAN DRIVE)
GA (SUB+5V REG)
CN2501
CN2503
CN2001
F2500
L2500 LFT
AC INLET
AC (L)
AC (N)
D2003 MAIN RECT
D2004 PROTECT
L2003
RY2001
Q2001
RELAY DRIVE
PFC (+)
PFC (−)
T2101 SRT
IC2101 PWM CONT.
VD VB VOCP COM VS GND RT VC-1
IC2001 SWITCHING CONV.
DRAIN AC SENSE LSENSE CATHODE GND VCC
CN2002
DC (+)
DC (−)
TO LAMP
D2201
D2202
D2203
D2204
D2205
IC2302 FAN+B (1) REG
IC2303 FAN+B (2), (3) REG
VCC CTL OUT C
Q2302-2304 SW
Q2301 FAN PROT OUT
IC2301 BUFF
OUT1 IN1 OUT2 IN2
CN2008 FAN1
CN2009 FAN2
CN2010 FAN3
FAN1+B GND FAN1 PROT FAN R. SENS
FAN2+B GND FAN2 PROT
FAN3+B GND FAN3 PROT
CN2005
FAN CONT1 FAN CONT2 FAN PROT P.CONT SUB+5V
TO BM BOARD CN1008
CN2003
FAN4+B FAN4 GND +17.0V +6.0V −6.0V
TO BM BOARD CN1007
CN2004
+4.5V FAN R. SENS
TO BM BOARD CN1006
CN2007
SUB+5V
CN2006
VCC DC GND
Q2101 VCC SW
Q2103 VC SW
PH2101 ISOLATOR
PH2102 ISOLATOR
Q2201 SW
Q2202-2204 P CONT DET
IC2201 SHUNT REG
IC2202 SHUNT REG
K REF A
CN2011
T2601 PIT
D2601
Q2601 SWITCHING CONV
C2 C1 B2 B1 E2 E1
T2602 PRT
D2602
Q2602 SW
Q2603-2605 +5V DET
IC2603 SHUNT REG
IC2602 V REF
CN2012
SUB+5V

F, G, GA BLOCK

Section 7
Diagrams

7-1. Frame Schematic Diagram



7-2. Schematic Diagrams and Printed Wiring Boards

Note:

- Parts marked " * " differ according to the model/destination. Refer to the mount table for each function.
- The parts marked " # " on schematic diagrams are not mounted.
- All capacitors are in µF unless otherwise noted. pF: µµF 50WV or less are not indicated except for electrolytics.
- All electrolytics are in 50 V unless otherwise specified.
- : fusible resistor
- : nonflammable resistor
- : panel designation and adjustment for repair
- Caution when replacing chip parts
  New parts must be attached after removal of the chip.
  Be careful not to heat the minus side of a tantalum capacitor, because it is easily damaged by the heat.

Reference information

RESISTOR	RN	: METAL FILM
	RC	: SOLID
	FPRD	: NONFLAMMABLE CARBON
	FUSE	: NONFLAMMABLE FUSIBLE
	RS	: NONFLAMMABLE METAL OXIDE
	RB	: NONFLAMMABLE CEMENT
	RW	: NONFLAMMABLE WIREWOUND
		: ADJUSTMENT RESISTOR
COIL	LF-8L	: MICRO INDUCTOR
CAPACITOR	TA	: TANTALUM
	PS	: STYROL
	PP	: POLYPROPYLENE
	PT	: MYLAR
	MPS	: METALIZED POLYESTER
	MPP	: METALIZED POLYPROPYLENE
	ALB	: BIPOLAR
	ALT	: HIGH TEMPERATURE
	ALR	: HIGH RIPPLE

[Measuring conditions, voltage and waveform]

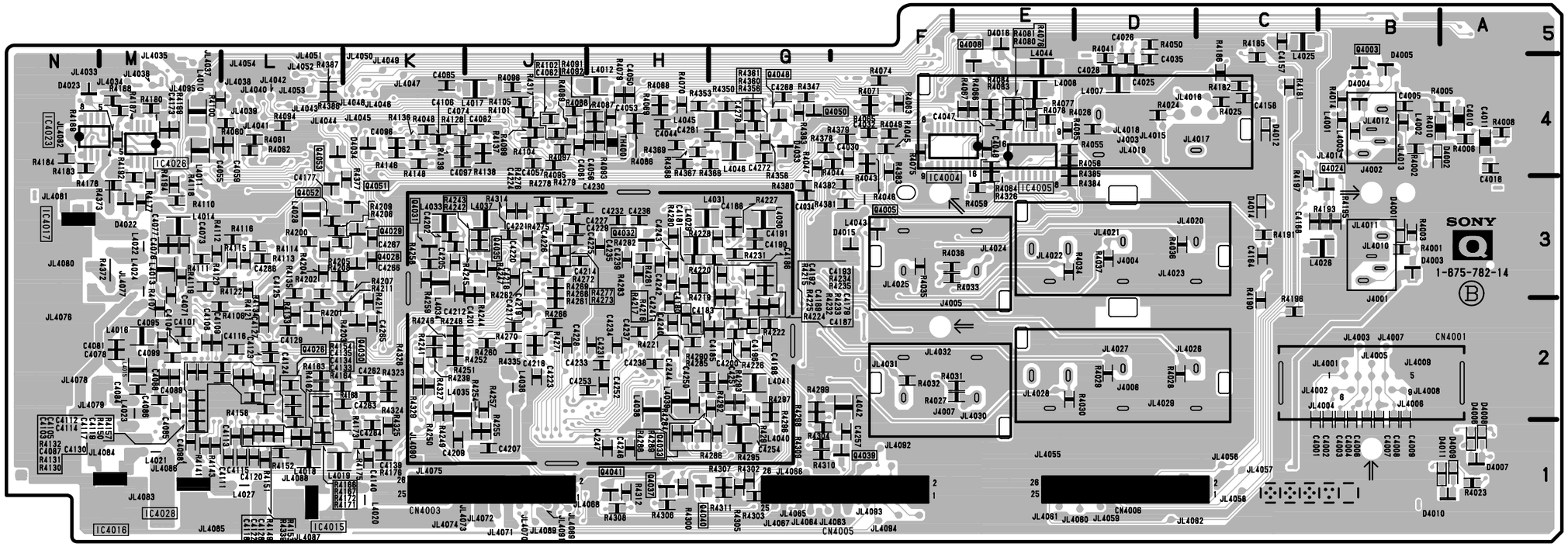
- A voltage value is the reference value between the measurement point and the earth, when the NTSC color bar signal is received from the color bar generator (digital multi-meter used: 10 M ohms/V DC).
- A voltage value is the reference value between the measurement point and the earth, when the NTSC color bar signal and RGB color bar signal are received from the color bar generator (digital multi-meter used: 10 M ohms/V DC).
- Unit of voltage is V (volt).
- : B+line
  : B– line
- Voltage variations may occur due to normal production tolerances.
- No mark : NTSC (3.58 MHz) color bar signal.
- [ ] : RGB color bar signal is received.
- ★ : Measurement disabled.
- Circled numbers indicate the reference waveform.
- : Signal path.

The components identified marked ⚠ are critical for safety.
Replace only with the part number specified.

Les composants identifiés par la marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

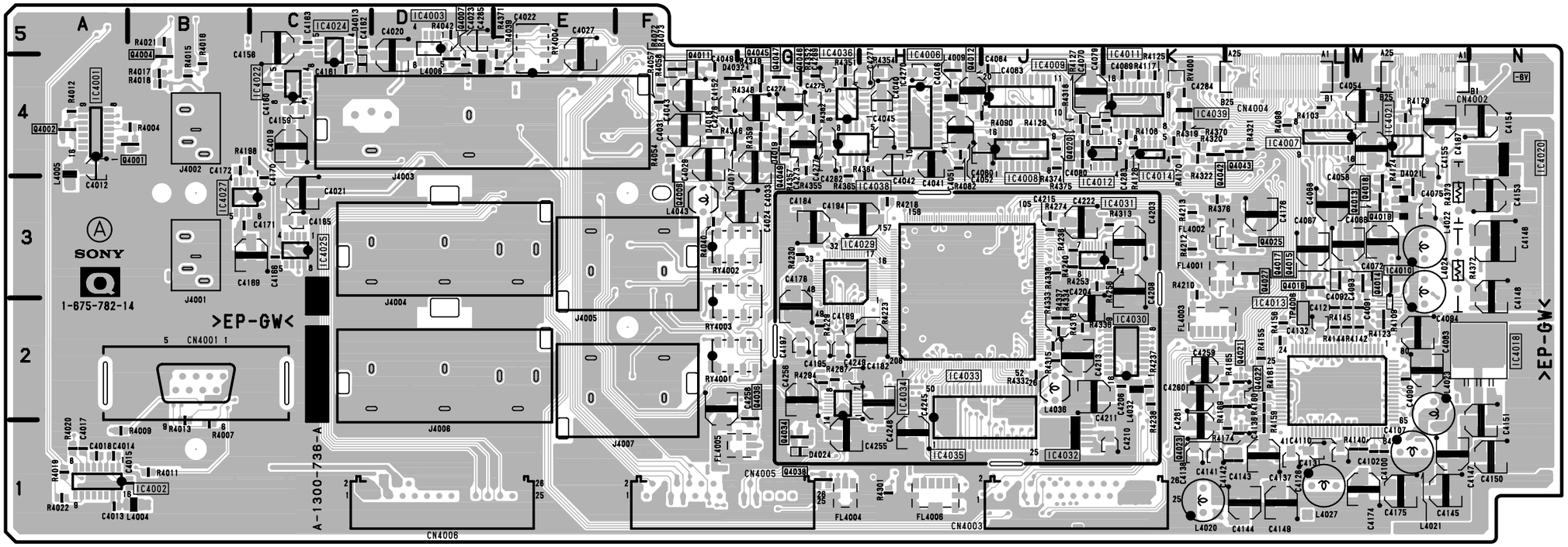
—
Q
—
1-675-782-13

D4001	*B-3		Q4001	A-4	
D4002	*A-4		Q4002	A-4	
D4003	*B-3		Q4003	*B-4	
D4004	*B-4		Q4004	B-4	
D4004	*B-4		Q4005	*F-3	
D4005	*B-4		Q4006	F-3	
D4006	*A-1		Q4007	D-5	
D4007	*A-1		Q4008	*E-4	
D4008	*A-1		Q4011	F-4	
D4009	*A-1		Q4012	H-5	
D4010	*A-1		Q4013	M-3	
D4011	*A-1		Q4014	M-3	
D4012	*C-4		Q4015	M-3	
D4013	C-5		Q4016	L-3	
D4014	*C-3		Q4017	L-3	
D4015	*F-3		Q4018	M-3	
D4016	*E-5		Q4019	M-3	
D4017	F-4		Q4020	J-4	
D4018	F-4		Q4021	L-2	
D4019	G-4		Q4022	L-2	
D4021	M-4		Q4023	L-1	
D4022	*M-3		Q4024	*B-3	
D4023	*N-4		Q4025	L-3	
D4024	G-1		Q4026	*L-2	
D4032	F-4		Q4027	L-3	
D4033	*G-4		Q4028	*K-3	
D4034	*K-4		Q4029	*K-3	
			Q4030	*K-2	
IC4001	A-4		Q4031	*K-3	
IC4002	A-1		Q4032	*H-3	
IC4003	D-5		Q4033	*H-1	
IC4004	*F-4		Q4034	G-1	
IC4005	*E-4		Q4035	*J-3	
IC4006	H-4		Q4036	G-2	
IC4007	L-4		Q4037	*H-1	
IC4008	J-4		Q4038	G-1	
IC4009	J-4		Q4039	*F-1	
IC4010	M-3		Q4040	*H-1	
IC4011	K-4		Q4041	*H-1	
IC4012	J-4		Q4042	K-4	
IC4013	L-2		Q4043	L-4	
IC4014	K-4		Q4045	G-5	
IC4015	*L-1		Q4046	G-5	
IC4016	*M-1		Q4047	G-5	
IC4017	*N-3		Q4048	*G-4	
IC4018	N-2		Q4049	G-4	
IC4020	N-4		Q4050	*G-4	
IC4021	M-4		Q4051	*K-3	
IC4022	C-4		Q4052	*L-3	
IC4023	*N-4		Q4053	*L-4	
IC4024	C-5				
IC4025	C-3		RV4001	K-4	
IC4026	*M-4				
IC4027	B-3		TP4006	L-2	
IC4028	*M-1				
IC4029	G-3		*:B Side mount		
IC4030	K-2				
IC4031	K-3				
IC4032	J-1				
IC4033	H-2				
IC4034	H-2				
IC4035	H-1				
IC4036	G-4				
IC4038	H-4				
IC4039	K-4				



Q – B SIDE –

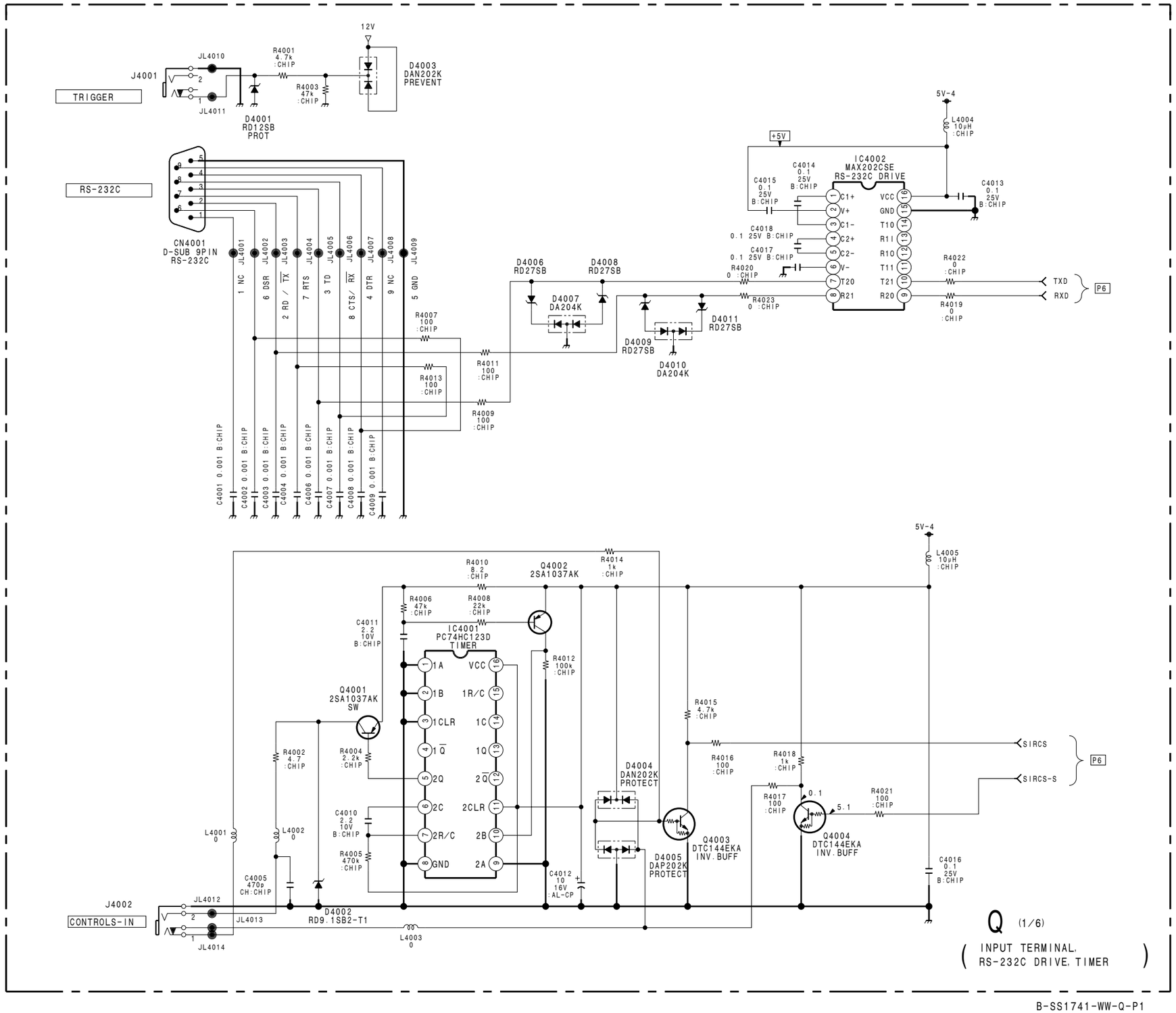
SUFFIX ; -14



Q – A SIDE –

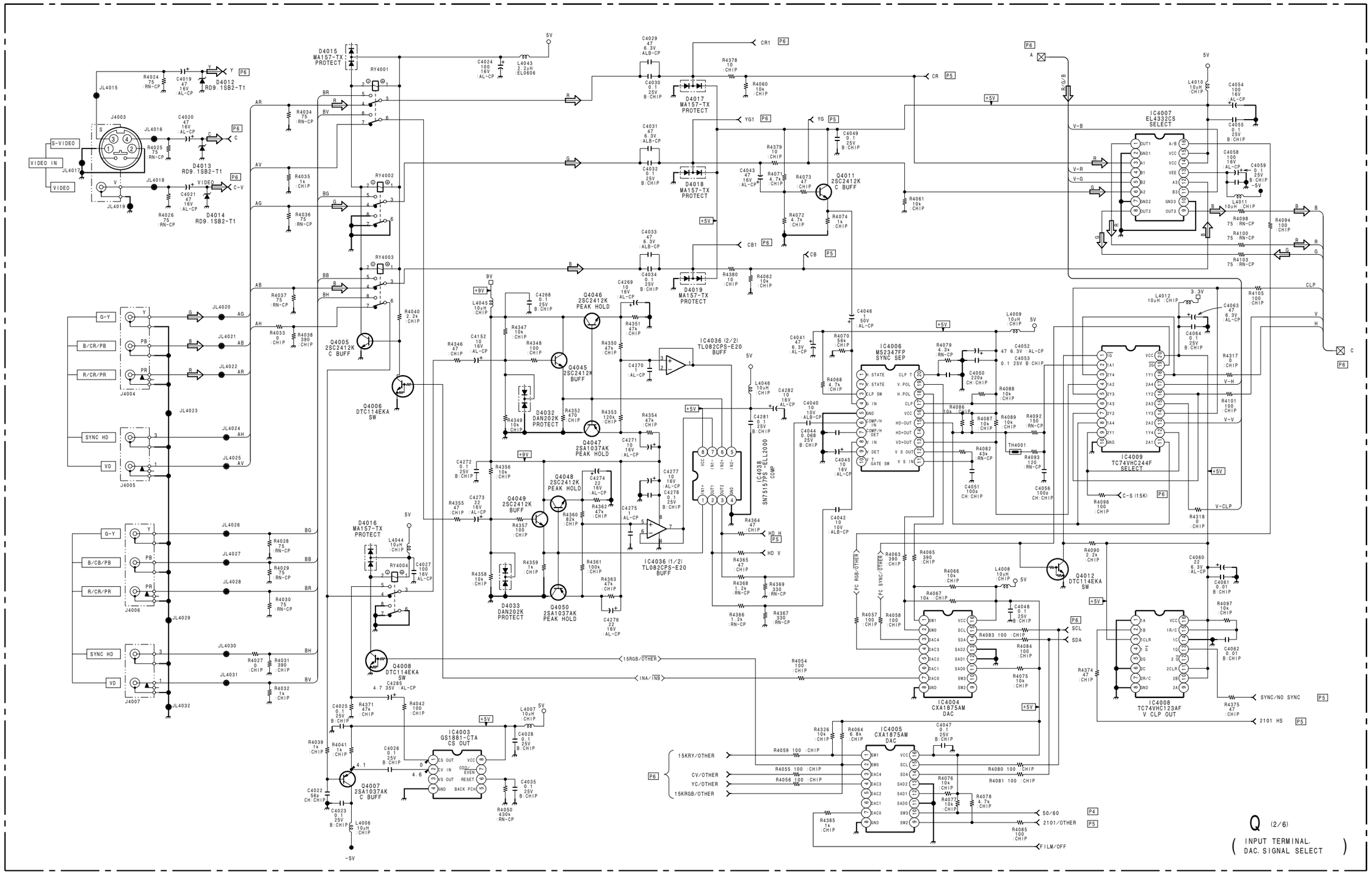
SUFFIX ; -14

- Refer to page 7-3 for Printed Wiring Board
- Refer to page 7-10 for IC Block Diagrams

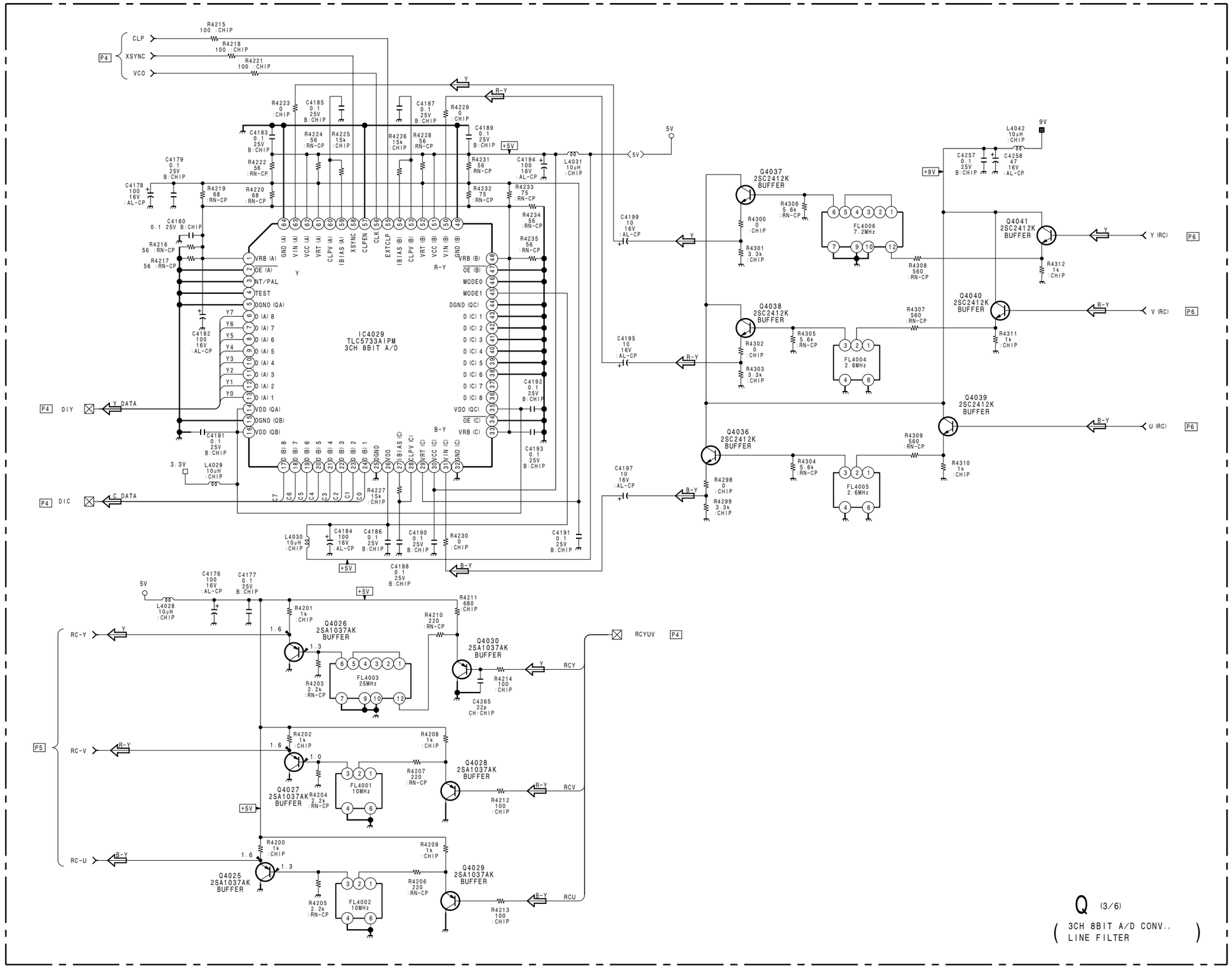


B-SS1741-WW-Q-P1

- Refer to page 7-3 for Printed Wiring Board
- Refer to page 7-10 for IC Block Diagrams

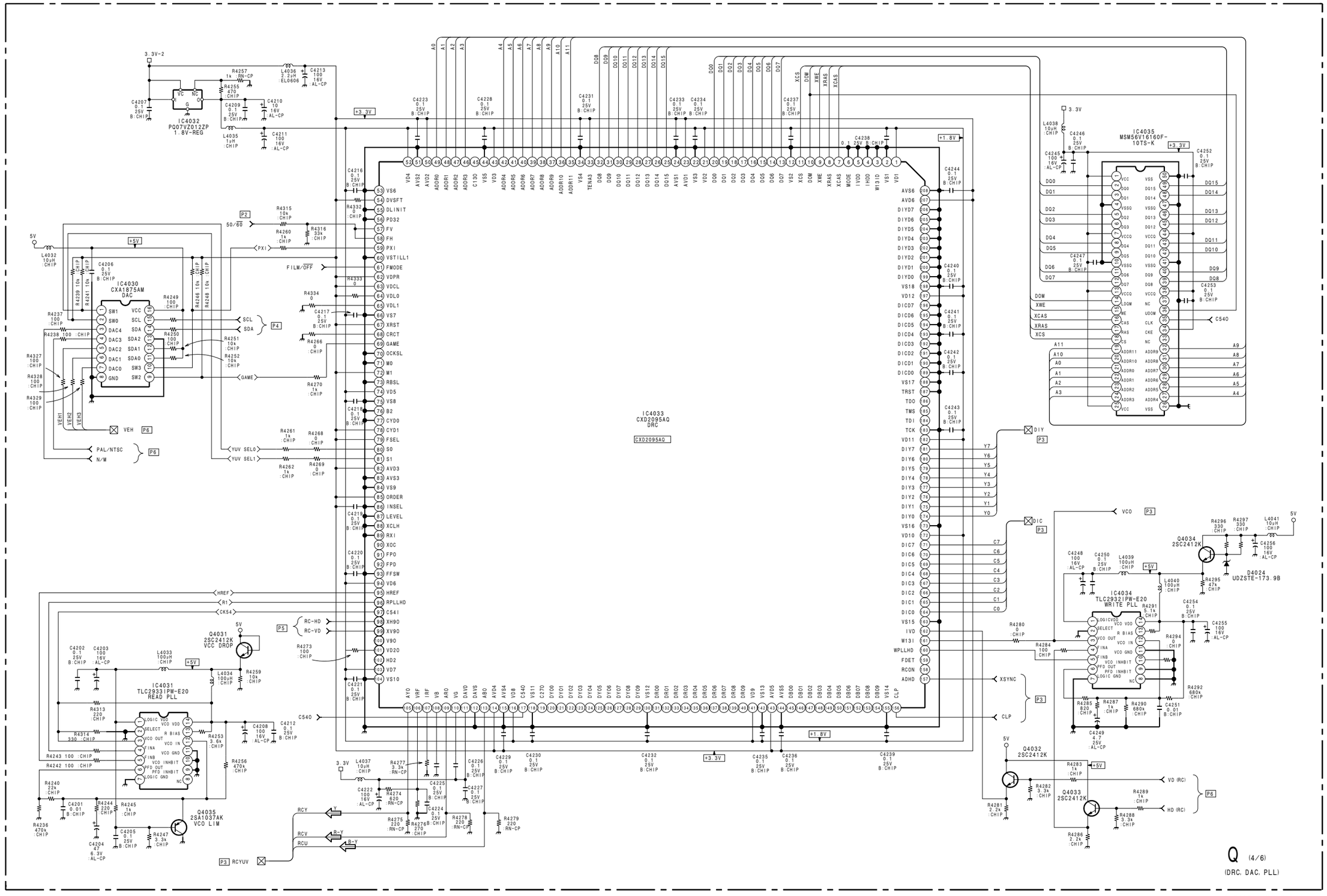


- Refer to page 7-3 for Printed Wiring Board
- Refer to page 7-10 for IC Block Diagrams

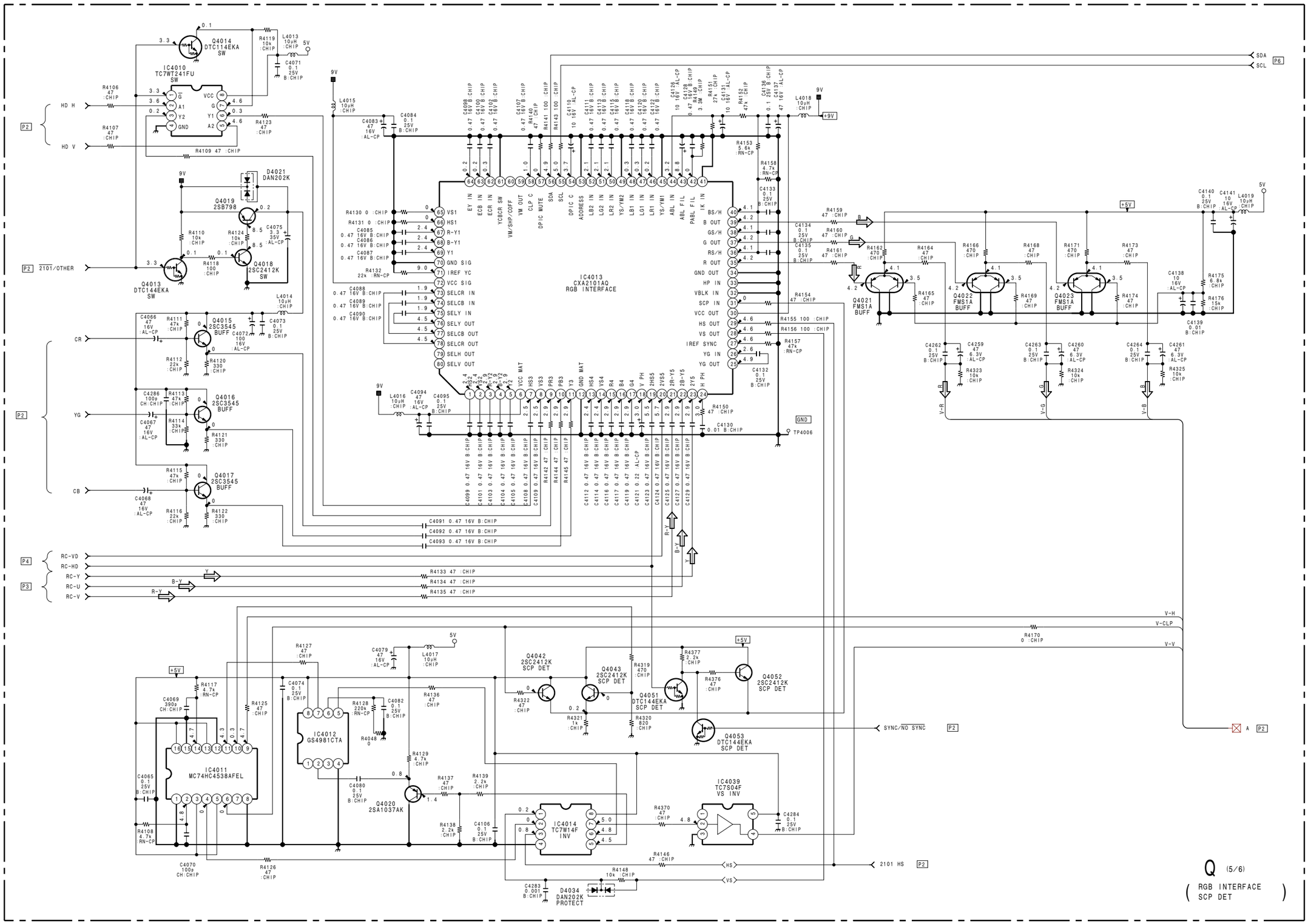


B-SS1741-WW-Q-P3

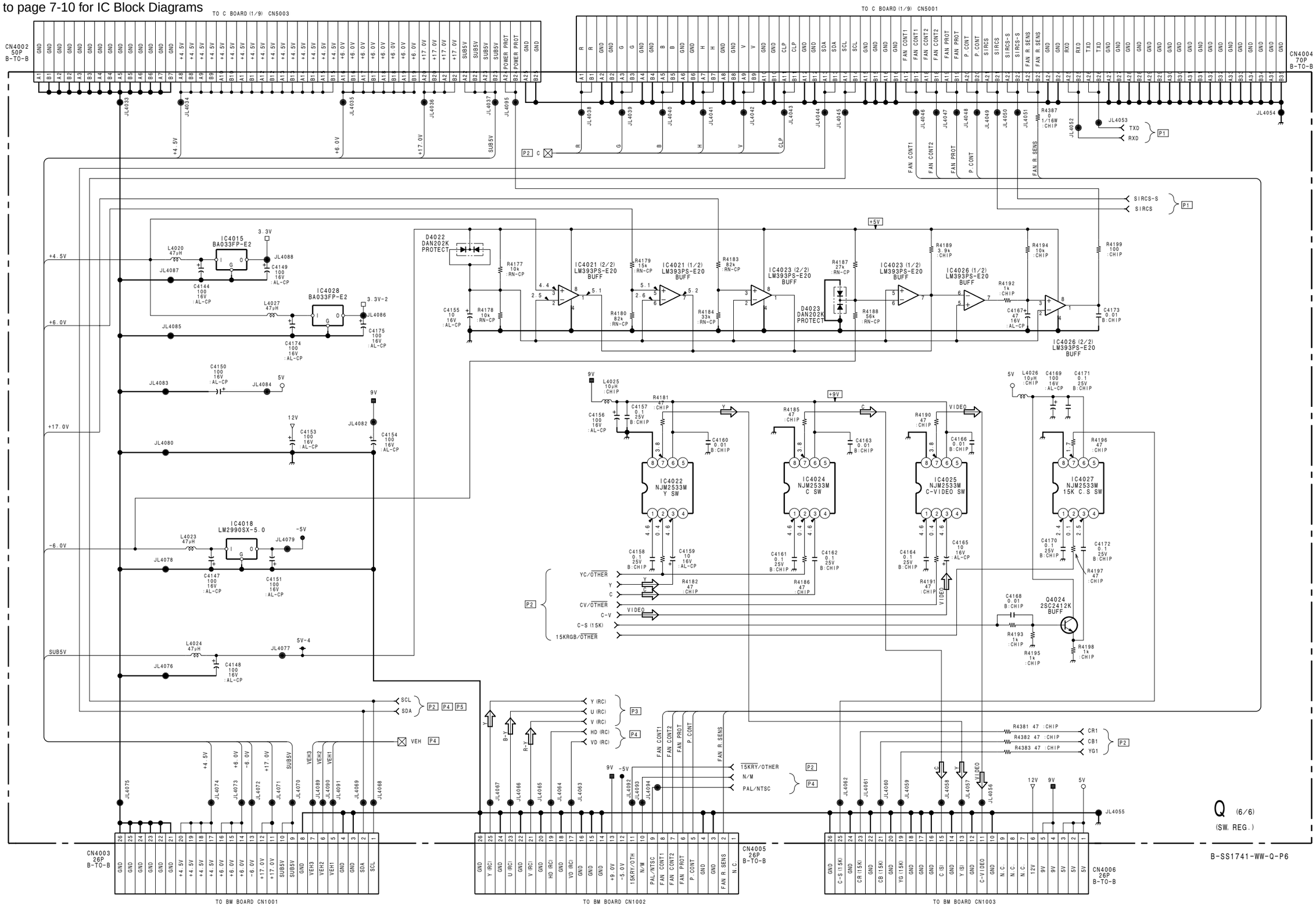
- Refer to page 7-3 for Printed Wiring Board
- Refer to page 7-10 for IC Block Diagrams



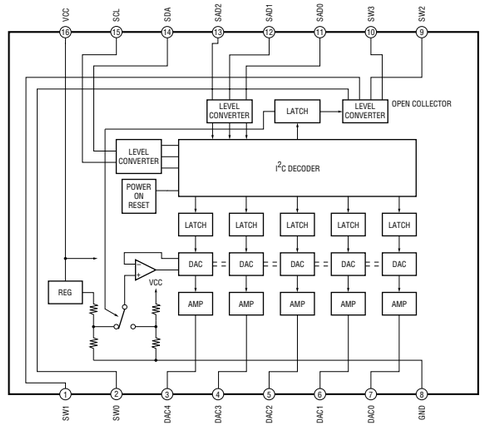
- Refer to page 7-3 for Printed Wiring Board
- Refer to page 7-10 for IC Block Diagrams



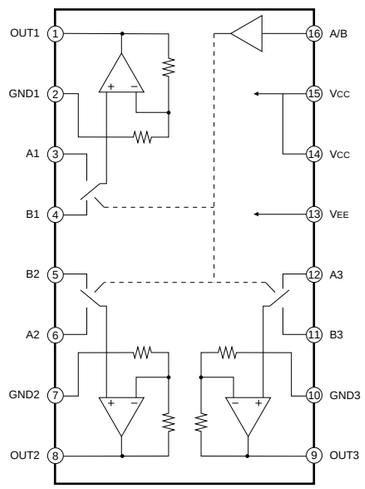
- Refer to page 7-3 for Printed Wiring Board
- Refer to page 7-10 for IC Block Diagrams



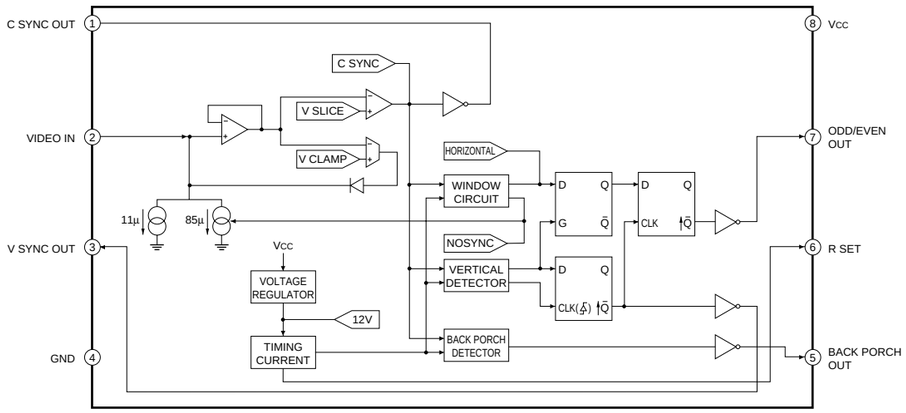
CXA1875AM-T4 (IC4004, IC4005, IC4030)



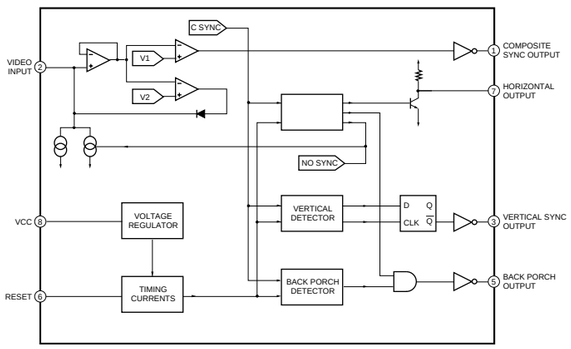
EL4332CS-TE2 (IC4007)



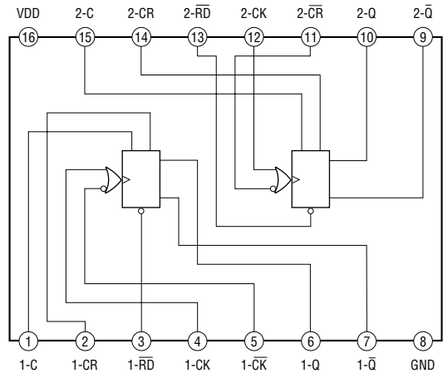
GS1881-CTA (IC4003)



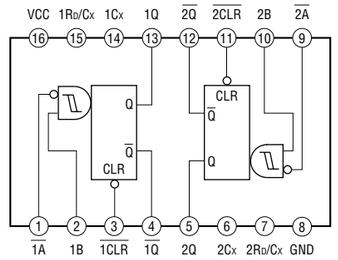
GS4981CTA (IC4012)



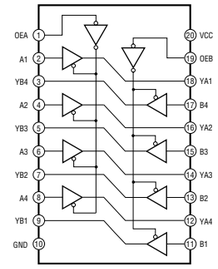
MC74HC4538AFEL (IC4011)



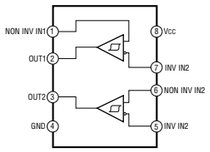
TC74 VHC123F(EL) (IC4008)



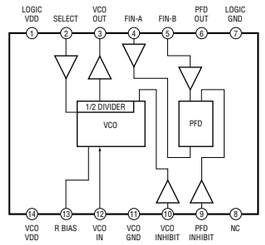
TC74VHC244F (EL) (IC4009)



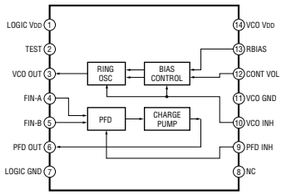
SN75157PS-ELL2000 (IC4038)



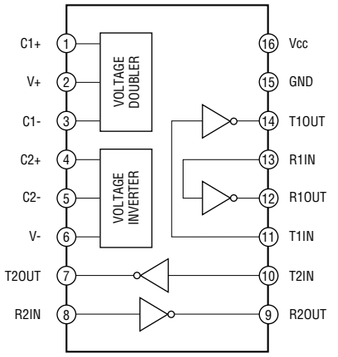
TLC2932IPW-E20 (IC4034)



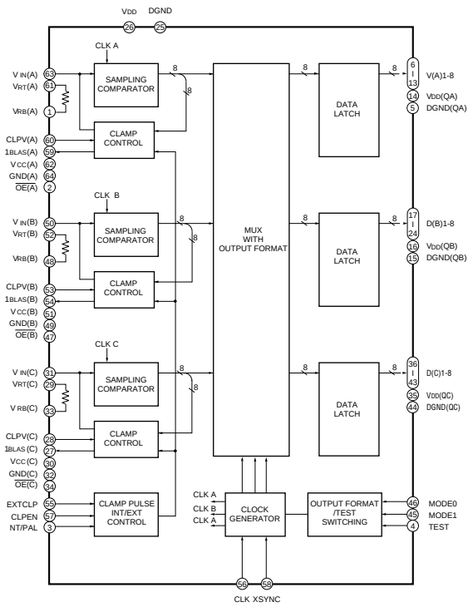
TLC2933IPWR (IC4031)



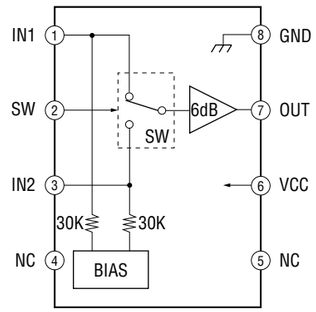
MAX202CSE-T (IC4002)



TLC5733AIPM (IC4029)



NJM2533M (TE2) (IC4022, IC4024, IC4025, IC4027)



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B
—
1-675-781-13

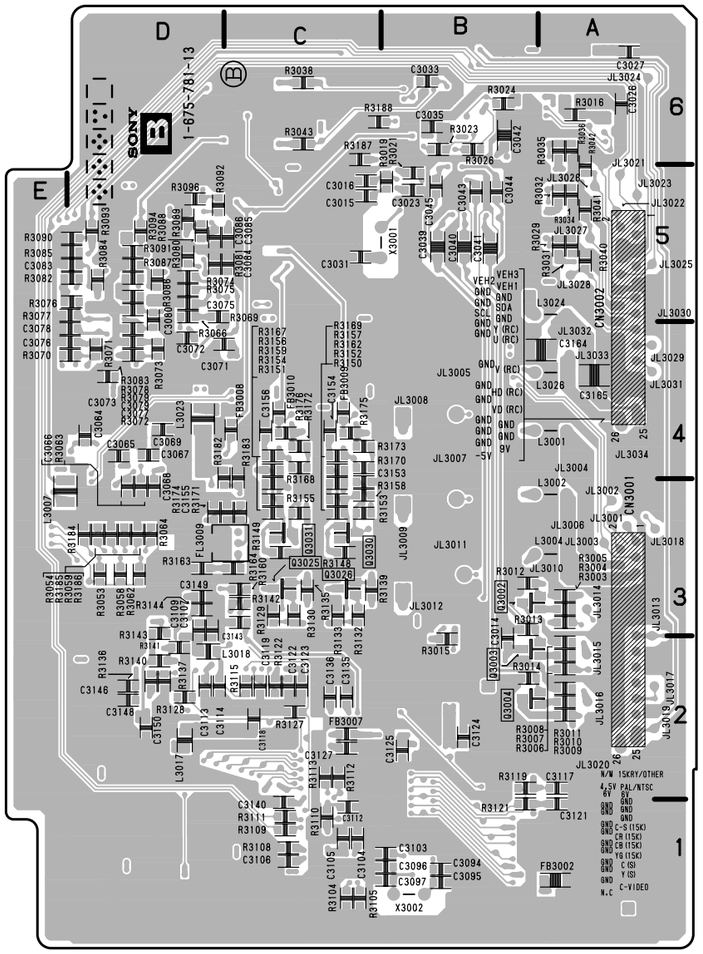
D3001 B-2

IC3001 B-5
IC3002 B-3
IC3004 B-3
IC3005 B-6
IC3006 B-5
IC3007 C-6
IC3008 D-6
IC3010 D-4
IC3011 D-1
IC3012 B-1
IC3013 C-2
IC3014 B-1

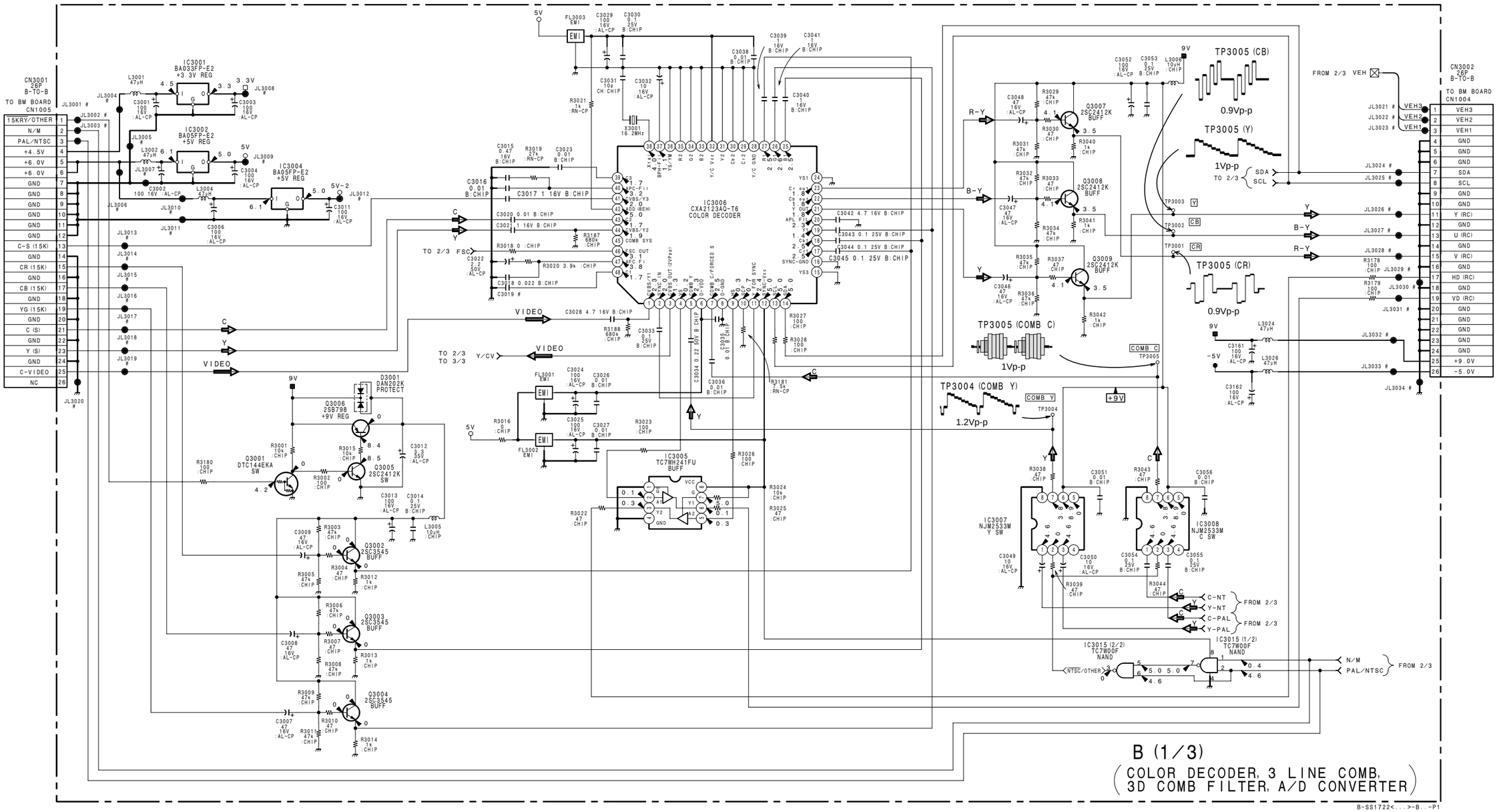
Q3001 B-3
Q3002 * B-3
Q3003 * B-2
Q3004 * B-2
Q3005 B-3
Q3006 B-2
Q3007 A-5
Q3008 A-5
Q3009 A-6
Q3010 D-5
Q3011 D-4
Q3012 D-4
Q3013 C-5
Q3014 C-5
Q3015 D-5
Q3015 C-5
Q3017 D-5
Q3018 D-5
Q3019 D-5
Q3020 D-5
Q3021 D-5
Q3022 D-5
Q3023 C-1
Q3024 D-2
Q3025 * C-3
Q3026 * C-3
Q3027 D-2
Q3029 C-3
Q3030 * C-3
Q3031 * C-3
Q3032 C-3
Q3033 B-4
Q3034 D-3
Q3035 C-4
Q3036 C-4
Q3037 C-3
Q3038 B-5
Q3038 C-4
Q3040 C-4
Q3041 C-4
Q3042 B-5
Q3043 D-3

TP3001 A-5
TP3002 A-5
TP3003 A-5
TP3004 B-6
TP3005 B-6
TP3006 A-1

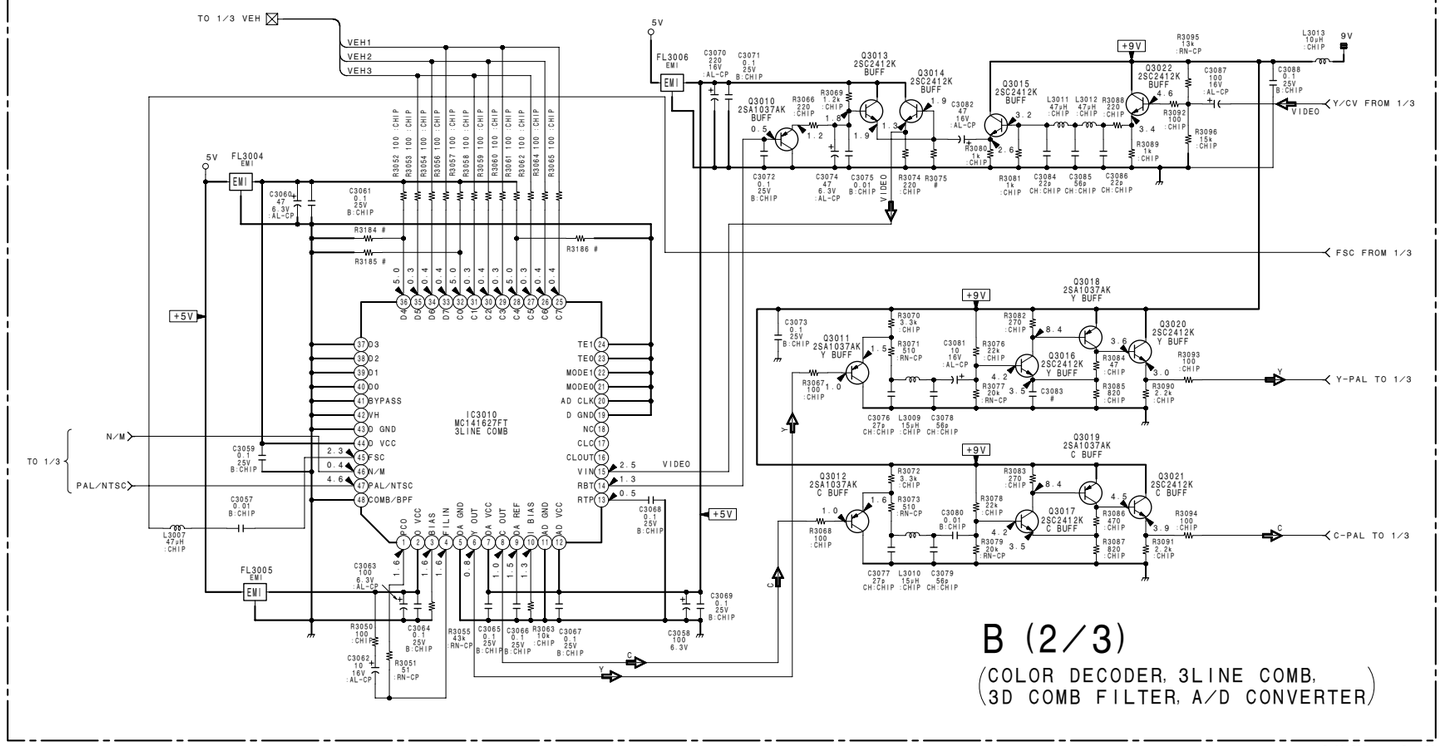
*:B Side mount



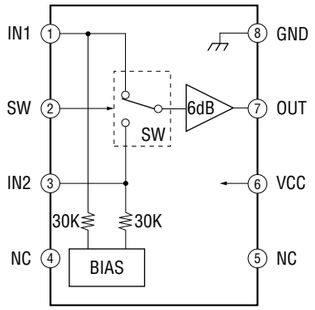
- Refer to page 8-11 for Printed Wiring Board
- Refer to page 8-13 for IC Block Diagrams



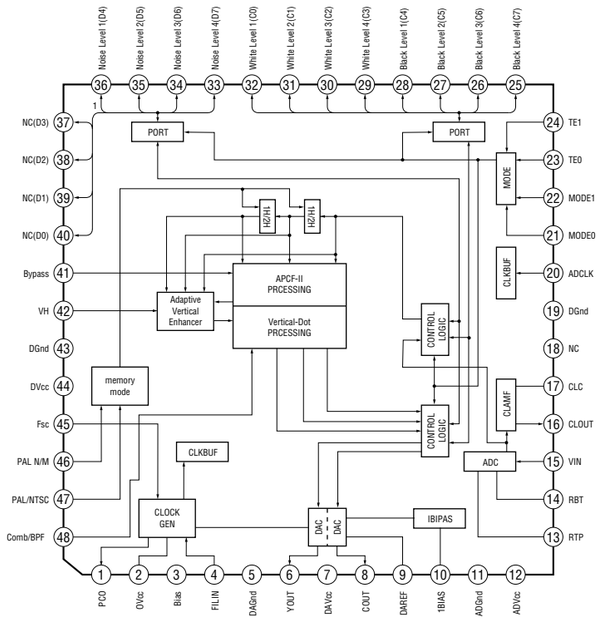
- Refer to page 8-11 for Printed Wiring Board
- Refer to page 8-13 for IC Block Diagrams



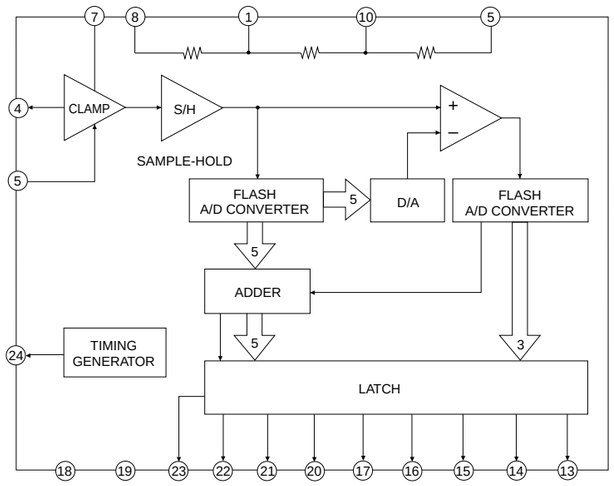
NJM2533M (TE2) (IC3007, IC3006)



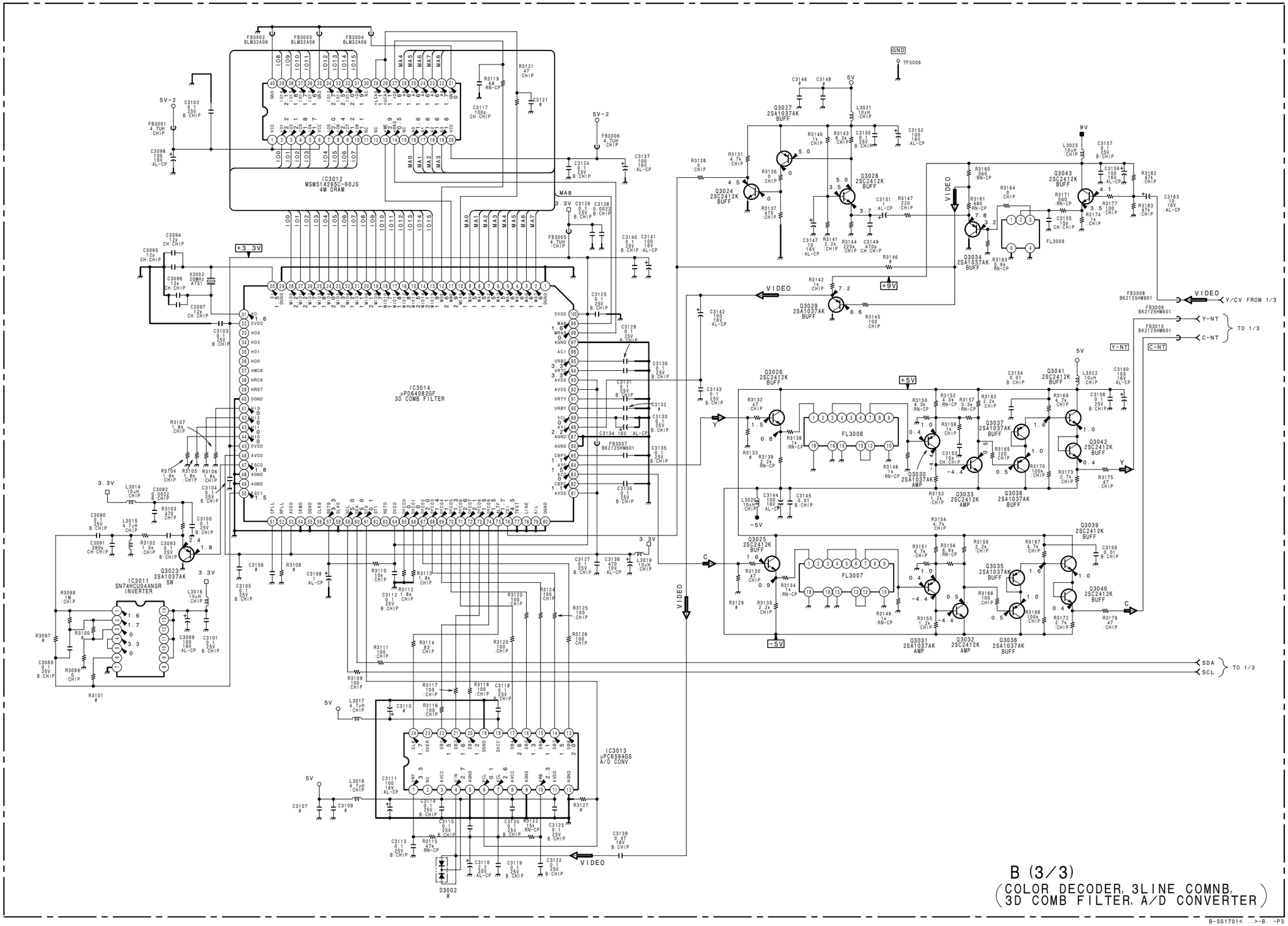
MC141627FT (IC3010)

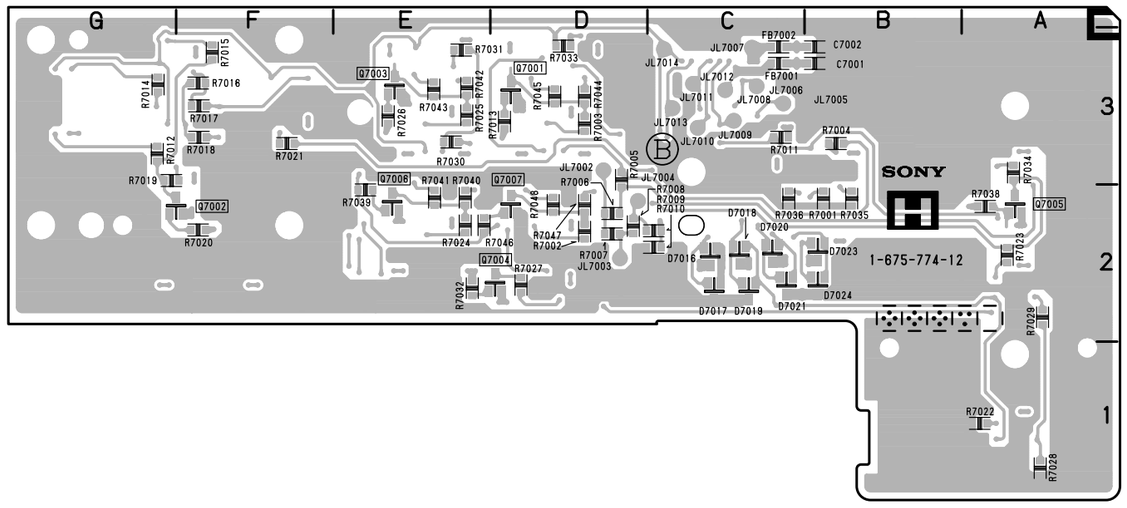


UPC659AGS-E2 (IC3013)



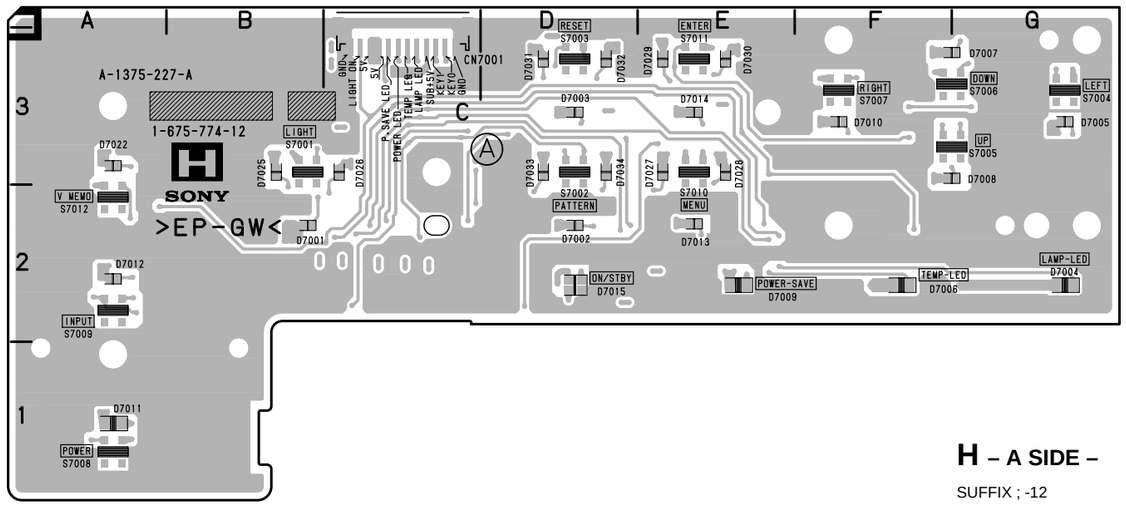
- Refer to page 8-11 for Printed Wiring Board
- Refer to page 8-13 for IC Block Diagrams





H – B SIDE –

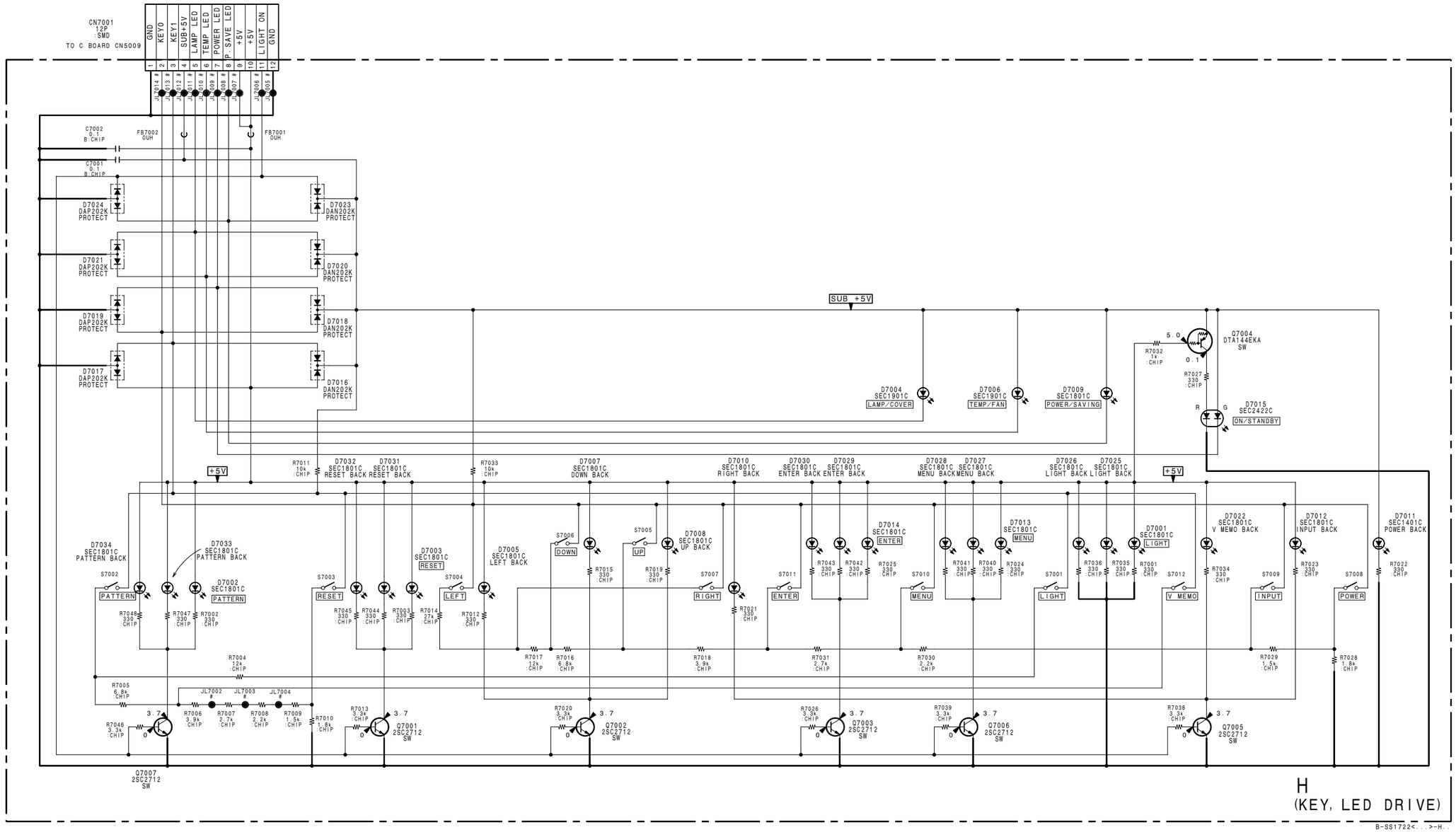
SUFFIX ; -12

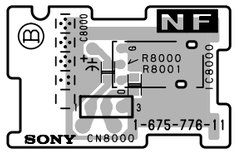


H – A SIDE –

SUFFIX ; -12

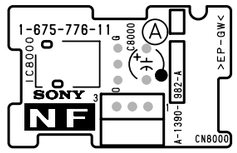
• Refer to page 8-15 for Printed Wiring Board





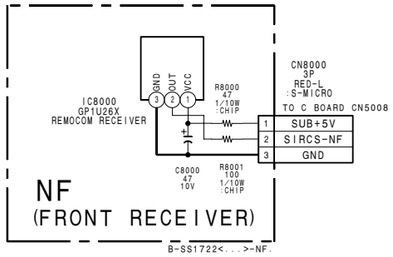
NF – B SIDE –

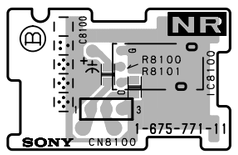
SUFFIX ; -11



NF – A SIDE –

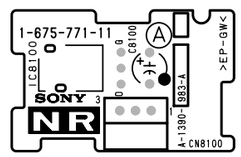
SUFFIX ; -11





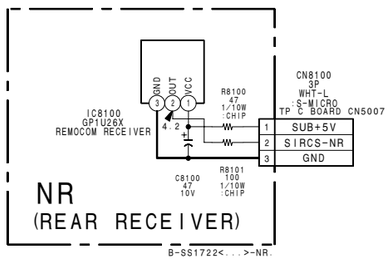
NR – B SIDE –

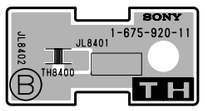
SUFFIX ; -11



NR – A SIDE –

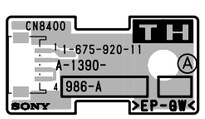
SUFFIX ; -11





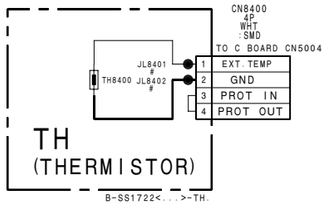
TH – B SIDE –

SUFFIX ; -11



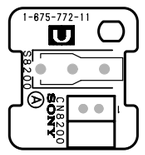
TH – A SIDE –

SUFFIX ; -11



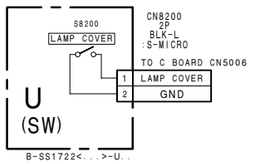
U – B SIDE –

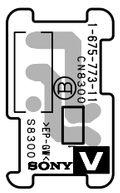
SUFFIX ; -11



U – A SIDE –

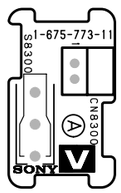
SUFFIX ; -11





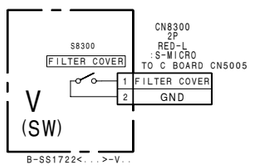
V – B SIDE –

SUFFIX ; -11



V – A SIDE –

SUFFIX ; -11



C

1-675-783-13

D5001	* D-3	Q5602	* E-6
D5002	* D-3	Q5603	* G-6
D5006	* B-10	Q5604	* G-6
D5009	* D-1	Q5701	* H-7
D5011	* B-10	Q5702	* H-8
D5012	* C-1	Q5703	* H-9
D5013	* C-1	Q5704	* H-9
D5014	* C-1	Q5801	* D-8
D5015	* D-1	Q5802	* C-2
D5016	* D-1		
D5018	* D-1	TP5001	F-5
D5202	* A-5	TP5013	F-4
		TP5021	F-3
IC5001	D-3	TP5022	A-3
IC5002	D-3	TP5023	A-3
IC5003	D-3	TP5024	A-2
IC5004	D-2	TP5025	A-3
IC5005	C-2	TP5026	A-2
IC5006	D-3	TP5027	A-3
IC5007	* D-2	TP5102	A-3
IC5008	C-1	TP5103	A-1
IC5101	* B-8	TP5104	A-2
IC5102	* A-4	TP5105	B-2
IC5102	* B-3	TP5107	A-1
IC5103	* C-1	TP5108	A-8
IC5104	* G-5	TP5303	D-7
IC5108	* F-5	TP5304	D-7
IC5109	* F-5	TP5305	B-8
IC5110	A-6	TP5306	E-6
IC5120	A-6	TP5401	E-1
IC5121	A-6	TP5501	H-6
IC5122	* J-10	TP5502	J-5
IC5201	* B-7	TP5503	J-6
IC5204	* A-5	TP5504	J-6
IC5205	A-5	TP5505	J-6
IC5206	A-5	TP5506	J-6
IC5207	B-5	TP5507	J-4
IC5207	* D-6	TP5603	F-6
IC5208	B-4	TP5604	F-6
IC5210	A-5	TP5606	D-6
IC5251	* D-7	TP5607	D-7
IC5252	D-6	TP5608	E-7
IC5301	* D-6	TP5610	D-6
IC5302	* D-6	TP5611	E-6
IC5303	* D-6	TP5612	G-7
IC5304	D-5	TP5613	E-7
IC5305	* D-5	TP5701	J-8
IC5306	D-4	TP5702	J-7
IC5307	* E-6	TP5703	H-7
IC5308	* A-2	TP5704	H-8
IC5310	D-7	TP5705	H-9
IC5311	* D-5	TP5706	H-10
IC5401	H-5	TP5707	H-10
IC5402	G-6	TP5801	C-9
IC5403	E-3	TP5802	C-8
IC5404	* E-2	TP5802	E-5
IC5501	H-5	TP5803	D-8
IC5502	J-5	TP5804	D-9
IC5504	H-6	TP5805	D-7
IC5505	K-7	TP5805	F-7
IC5507	* J-5	TP5806	D-8
IC5508	* H-6	TP5807	D-10
IC5602	G-6	TP5814	G-7
IC5701	H-7		
IC5702	J-9	*:B Side mount	
IC5801	C-8		
IC5801	F-6		
IC5802	D-9		
Q5001	* D-3		
Q5002	* D-3		
Q5003	C-1		
Q5003	J-9		
Q5004	J-9		
Q5005	J-9		
Q5017	* D-1		
Q5101	A-8		
Q5102	A-8		
Q5301	* D-4		
Q5303	* D-4		
Q5304	* D-4		
Q5401	* D-2		
Q5501	* H-7		
Q5502	* H-7		
Q5503	* H-7		
Q5504	* J-7		
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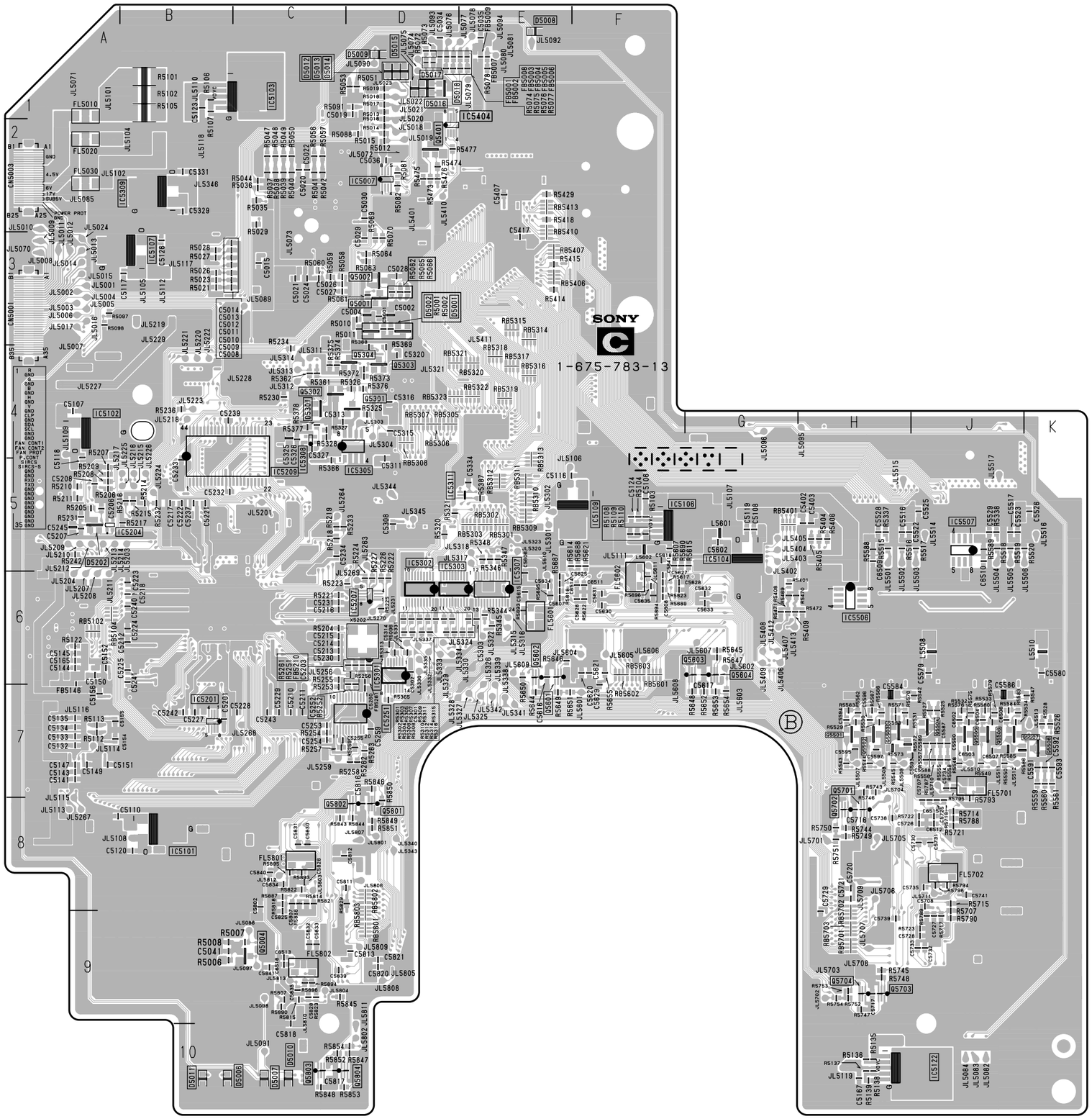
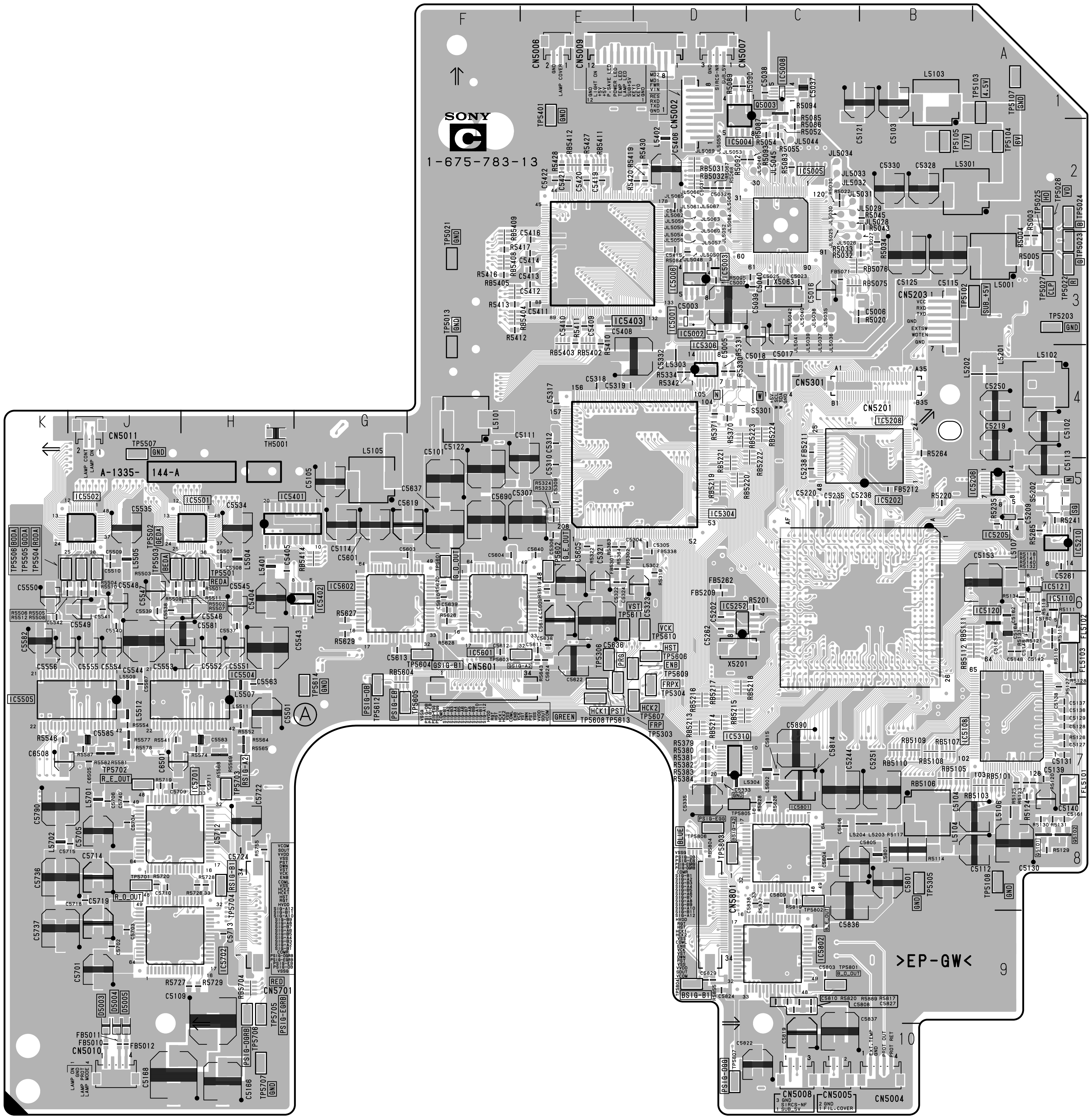
Q5506	* K-7		
Q5507	* K-7		
Q5508	* J-7		
Q5601	* E-7		



C – B SIDE –

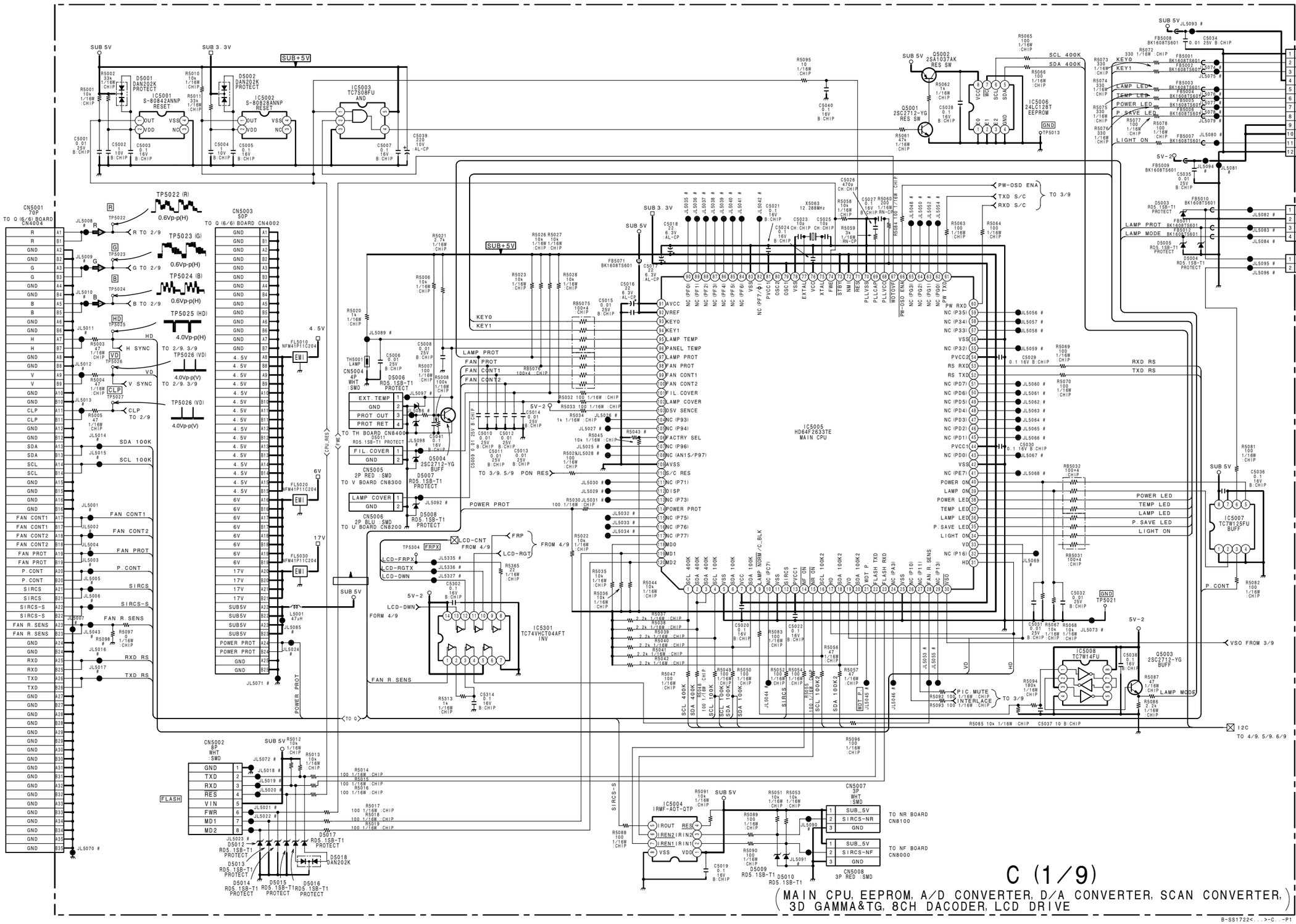
SUFFIX ; -13



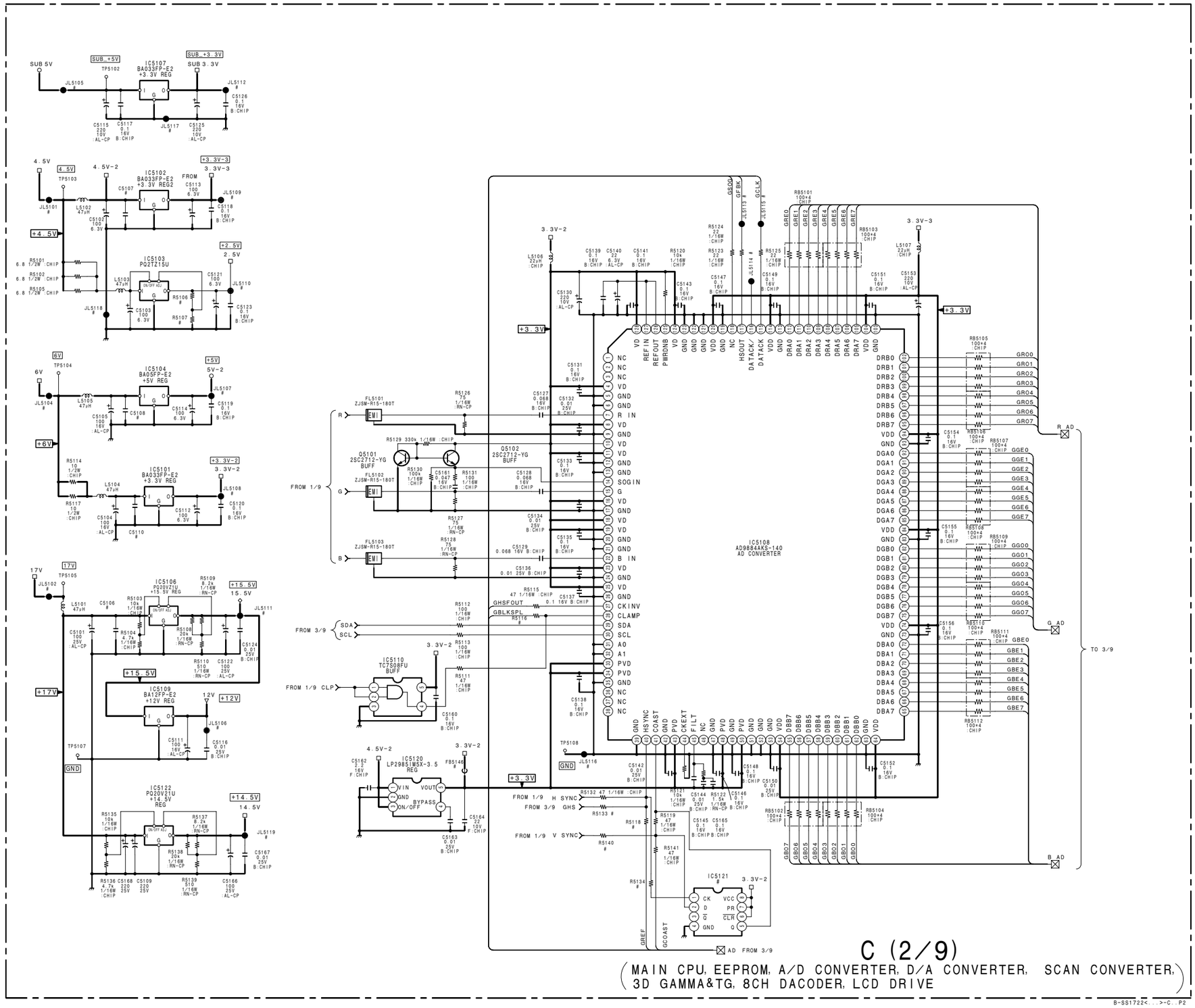
C – A SIDE –

SUFFIX ; -13

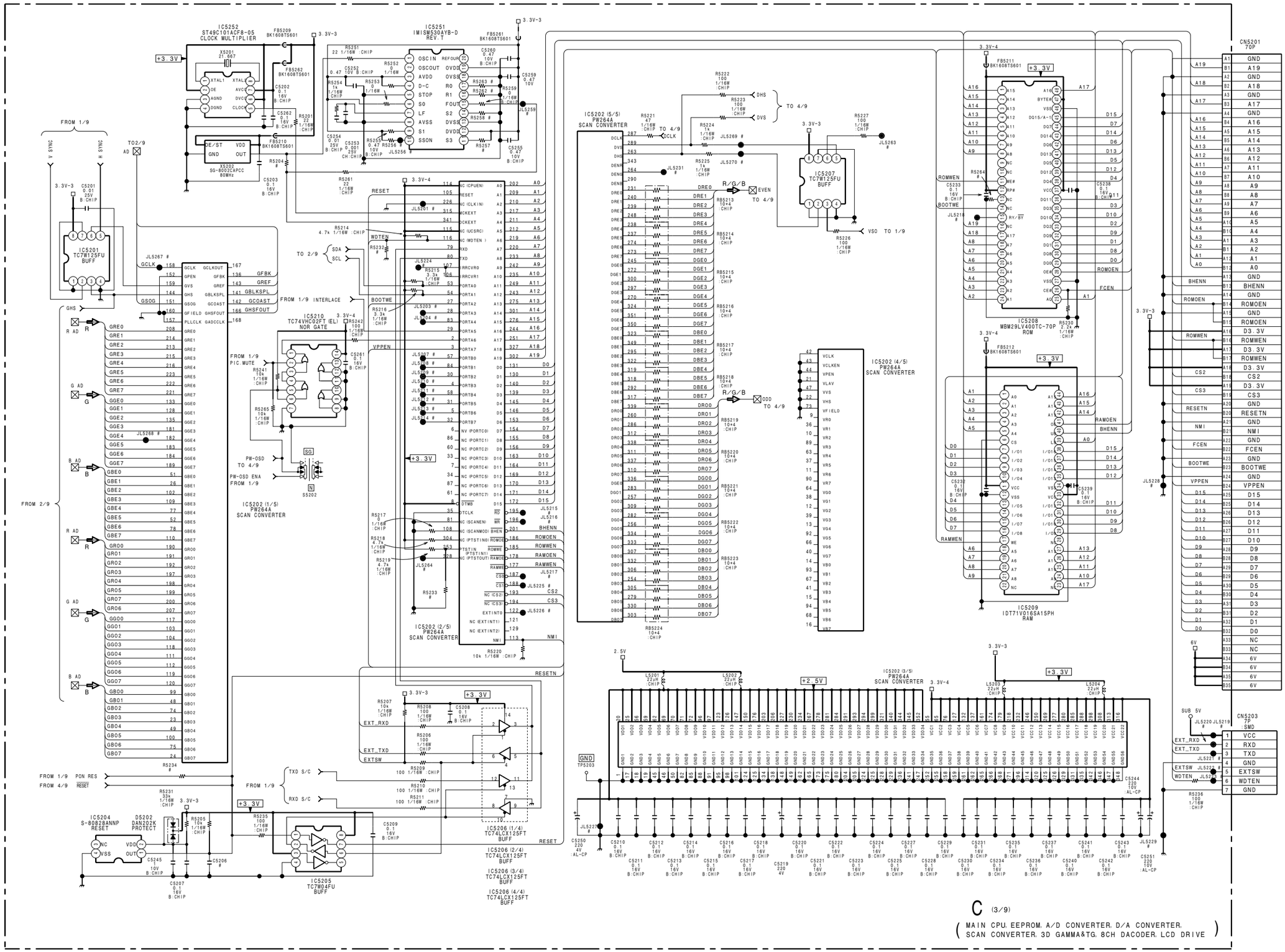
- Refer to page 8-18 for Printed Wiring Board
- Refer to page 8-29 for IC Block Diagrams



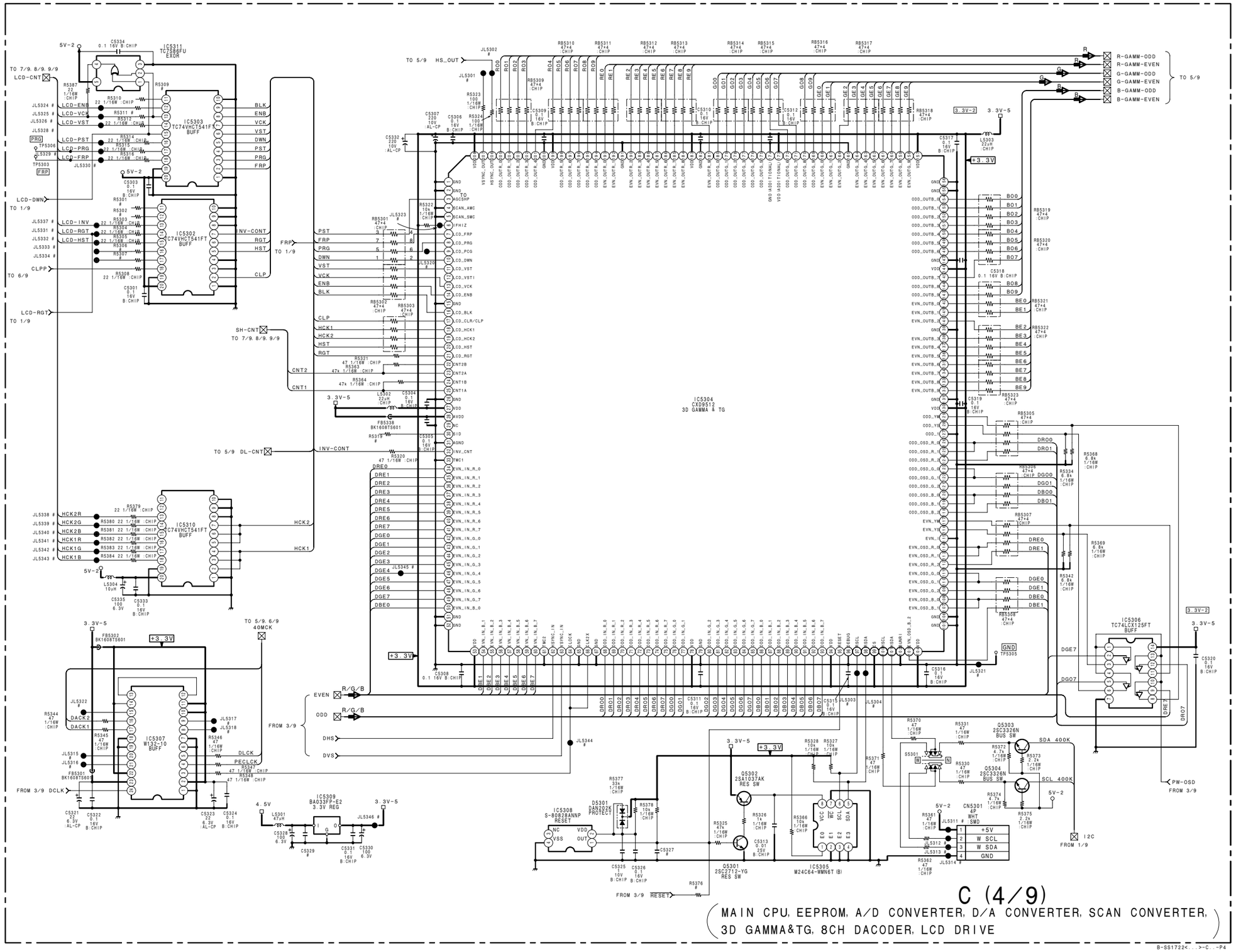
- Refer to page 8-18 for Printed Wiring Board
- Refer to page 8-29 for IC Block Diagrams



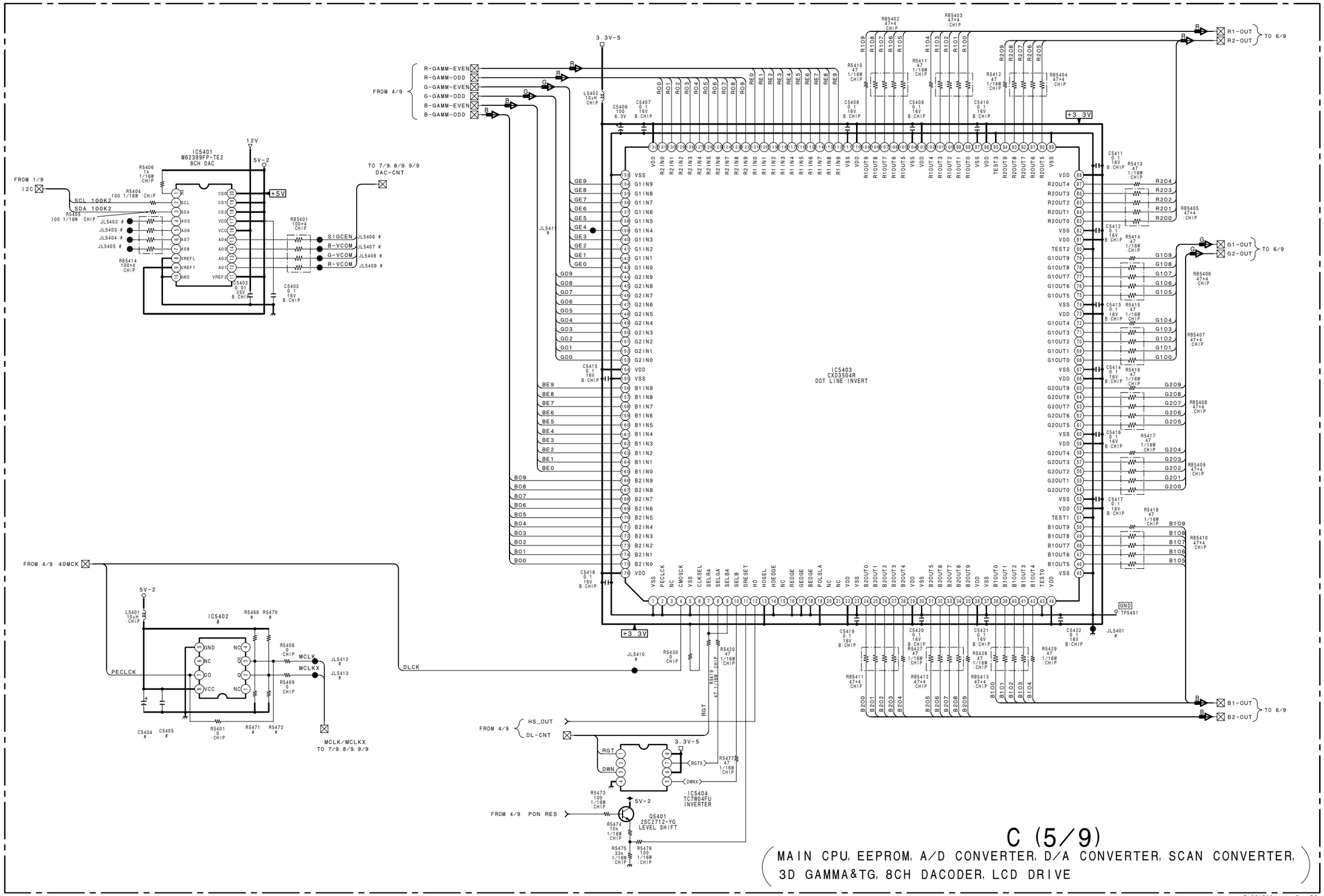
- Refer to page 8-18 for Printed Wiring Board
- Refer to page 8-29 for IC Block Diagrams



- Refer to page 8-18 for Printed Wiring Board
- Refer to page 8-29 for IC Block Diagrams



- Refer to page 8-18 for Printed Wiring Board
- Refer to page 8-29 for IC Block Diagrams

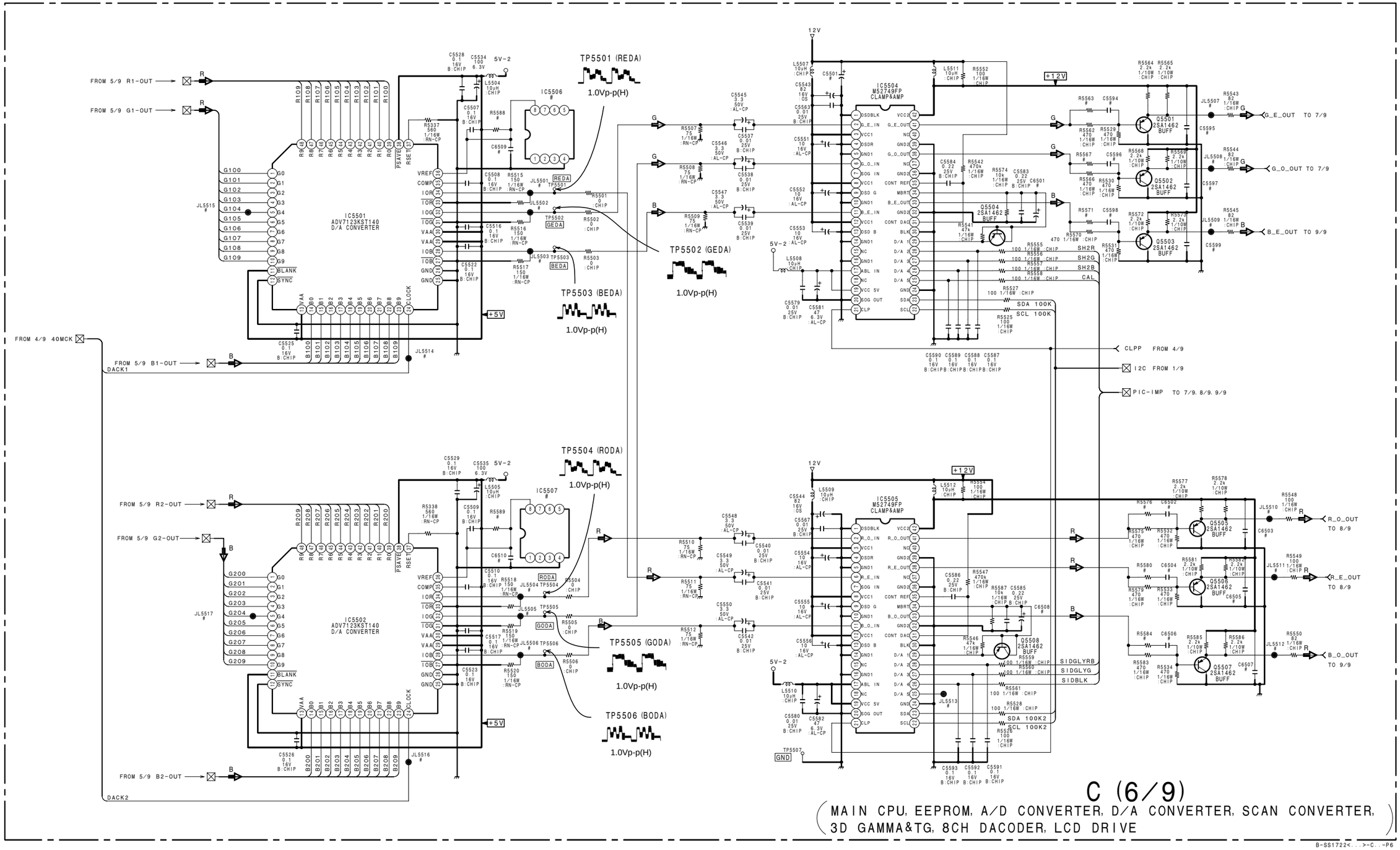


C (5/9)

MAIN CPU, EEPROM, A/D CONVERTER, D/A CONVERTER, SCAN CONVERTER, 3D GAMMA&TG, 8CH DACODER, LCD DRIVE

B-SS1722<...>-C..-P5

- Refer to page 8-18 for Printed Wiring Board
- Refer to page 8-29 for IC Block Diagrams

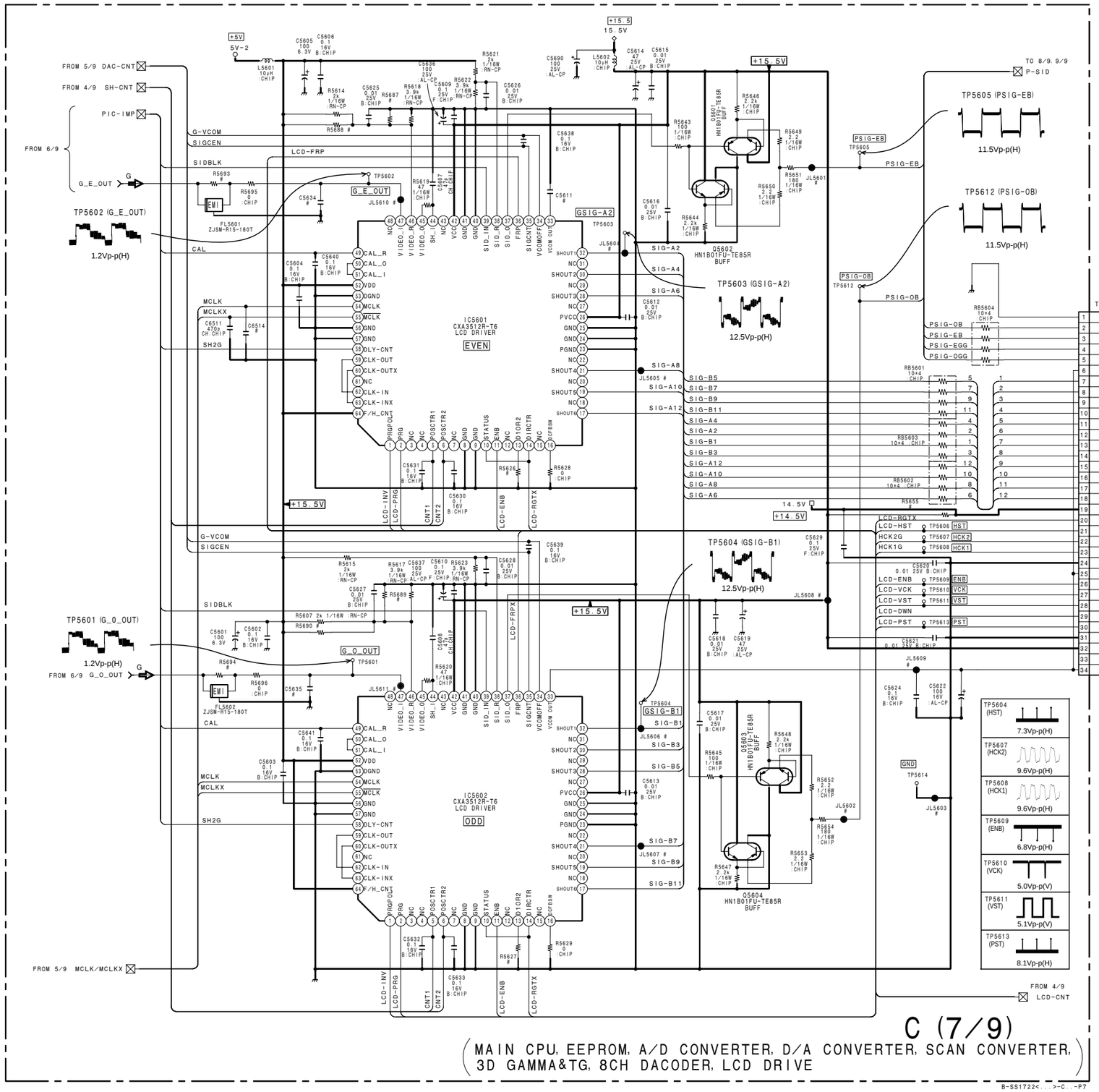


C (6/9)

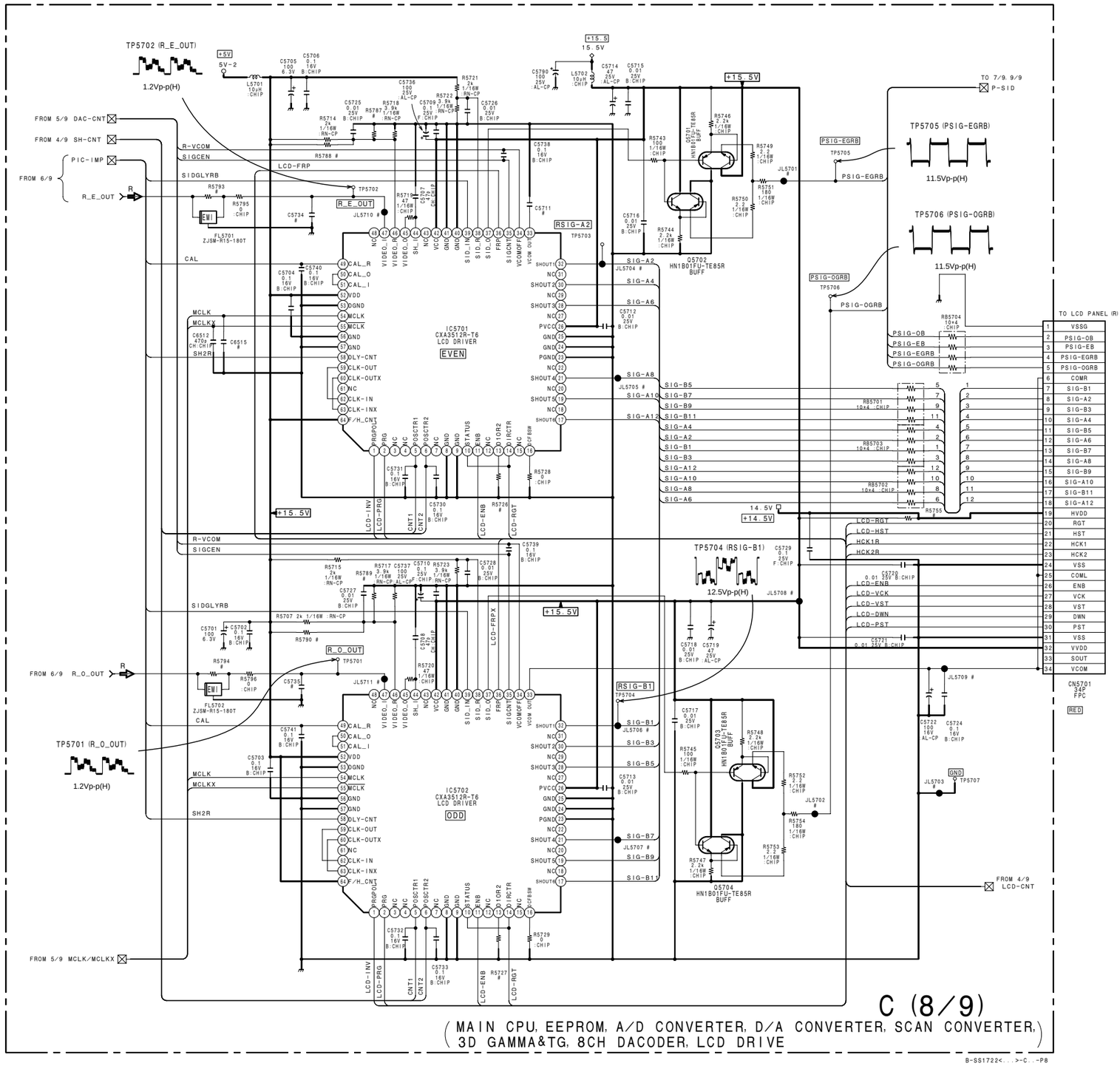
MAIN CPU, EEPROM, A/D CONVERTER, D/A CONVERTER, SCAN CONVERTER, 3D GAMMA&TG, 8CH DACODER, LCD DRIVE

B-SS1722<...>-C...-P6

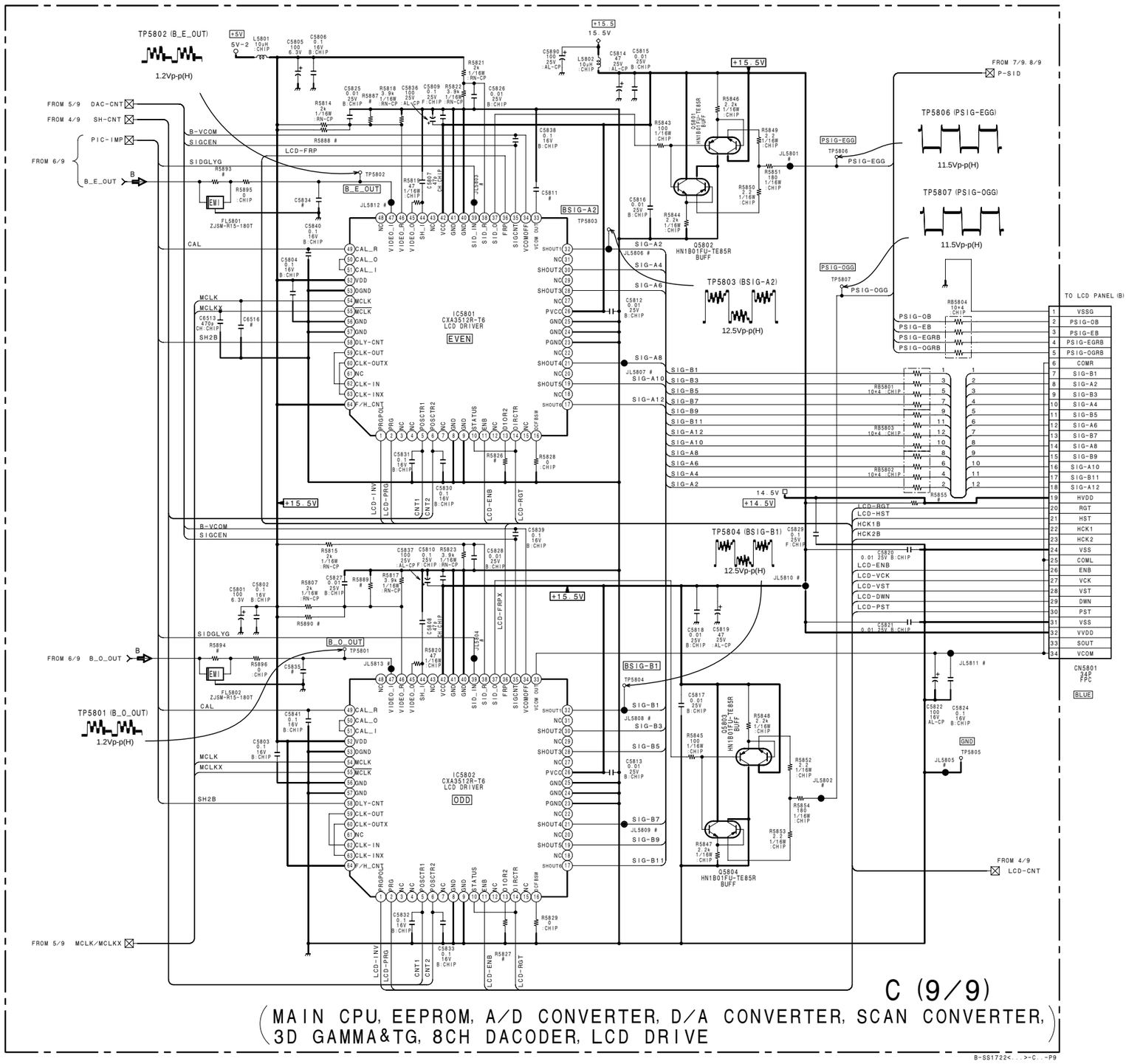
- Refer to page 8-18 for Printed Wiring Board
- Refer to page 8-29 for IC Block Diagrams



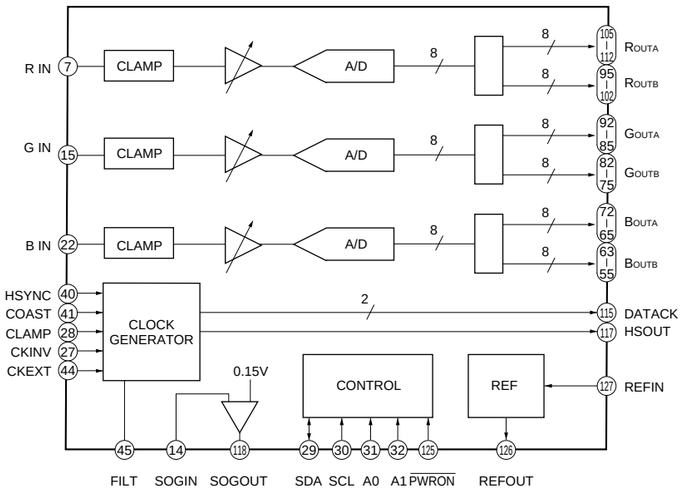
- Refer to page 8-18 for Printed Wiring Board
- Refer to page 8-29 for IC Block Diagrams



- Refer to page 8-18 for Printed Wiring Board
- Refer to page 8-29 for IC Block Diagrams



AD9884ASK-140 (IC5108)



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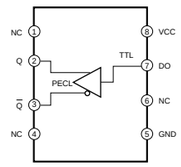

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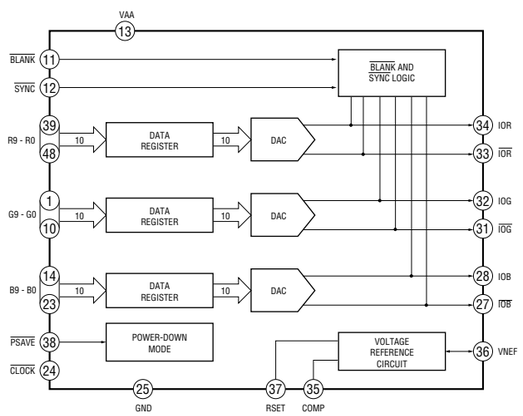
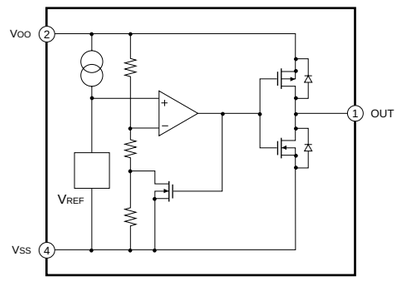


S-80828ANNP-EDR-T2 (IC5001, IC5002, IC5204, IC5308)



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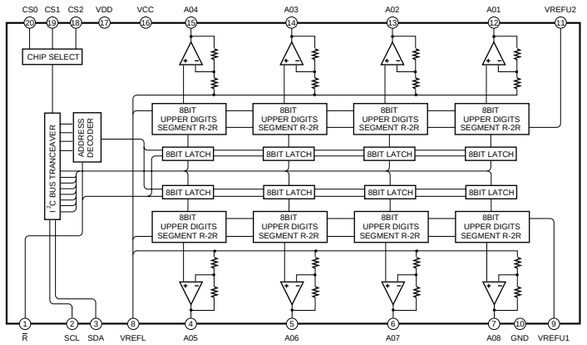
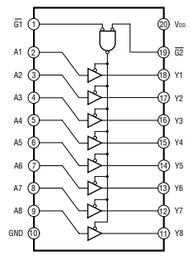
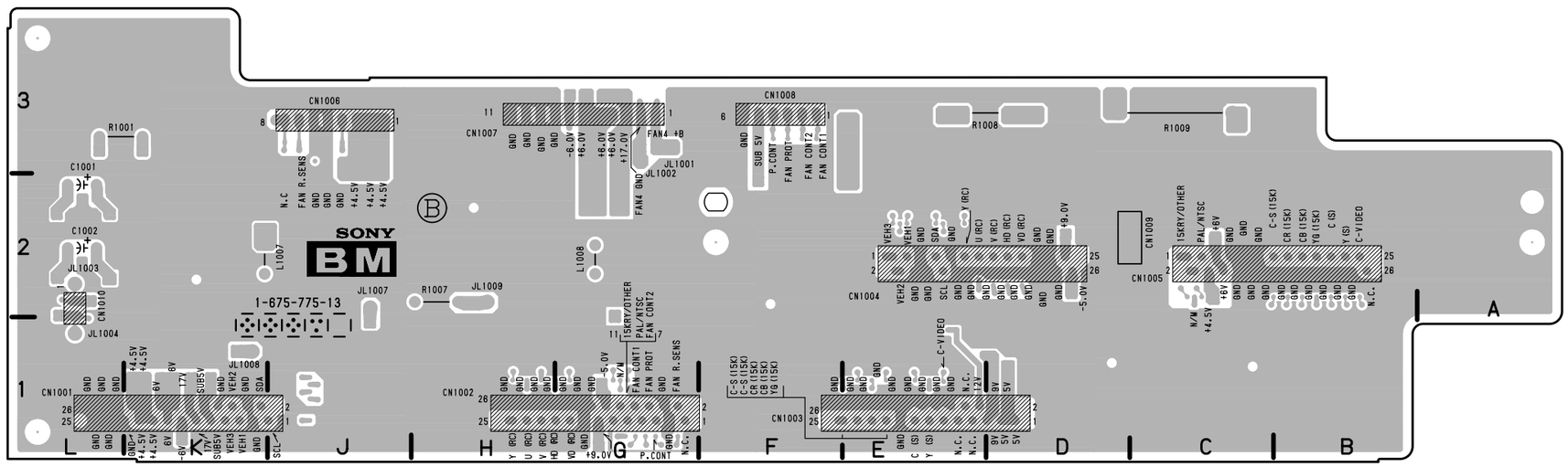


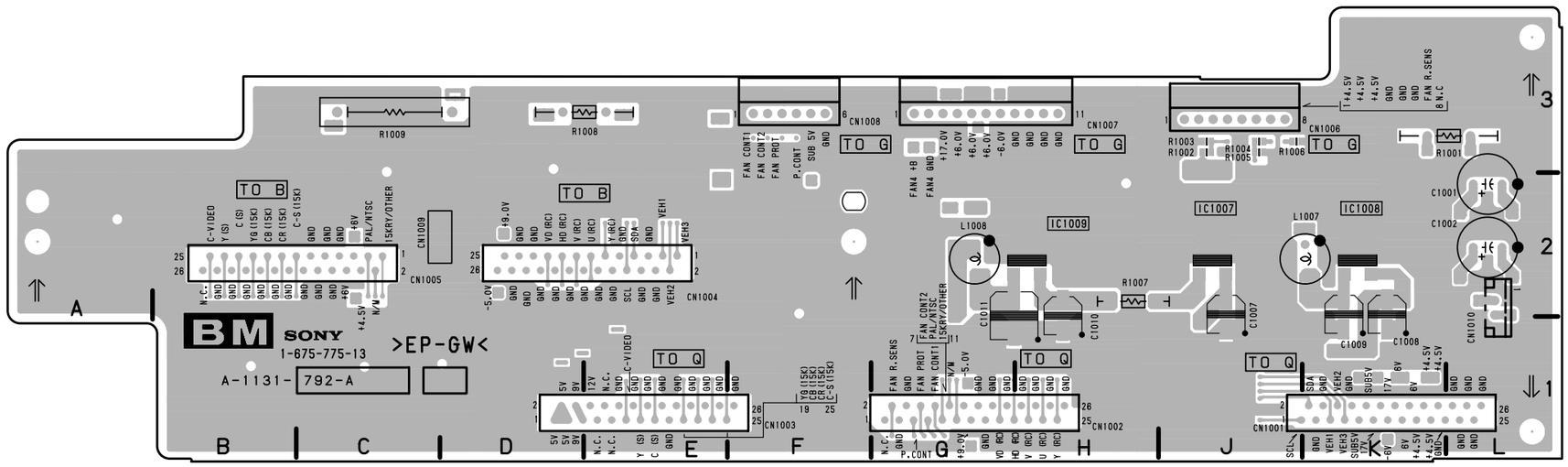
TC74VHCT541AFT (EL) (IC5302, 5303, 5310)





BM – B SIDE –

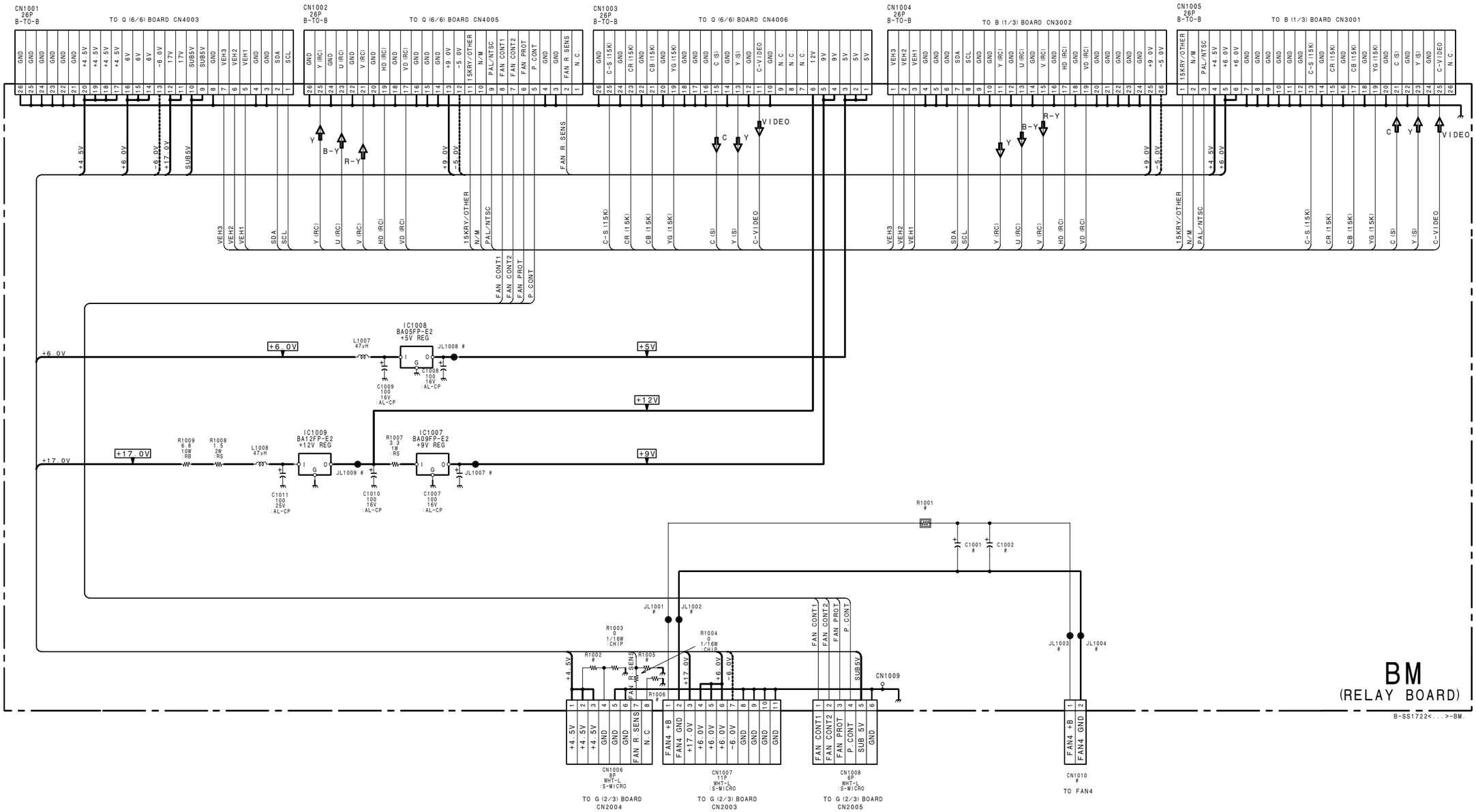
SUFFIX ; -13

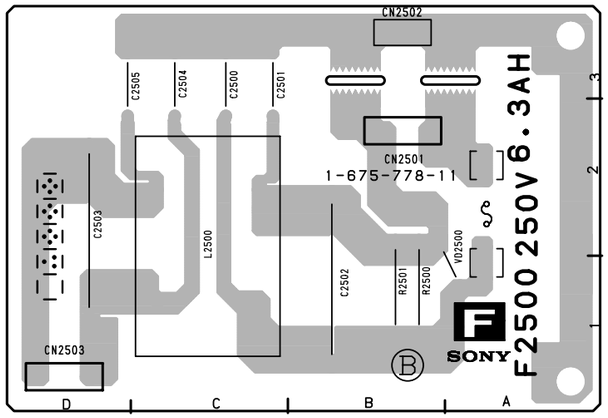


BM – A SIDE –

SUFFIX ; -13

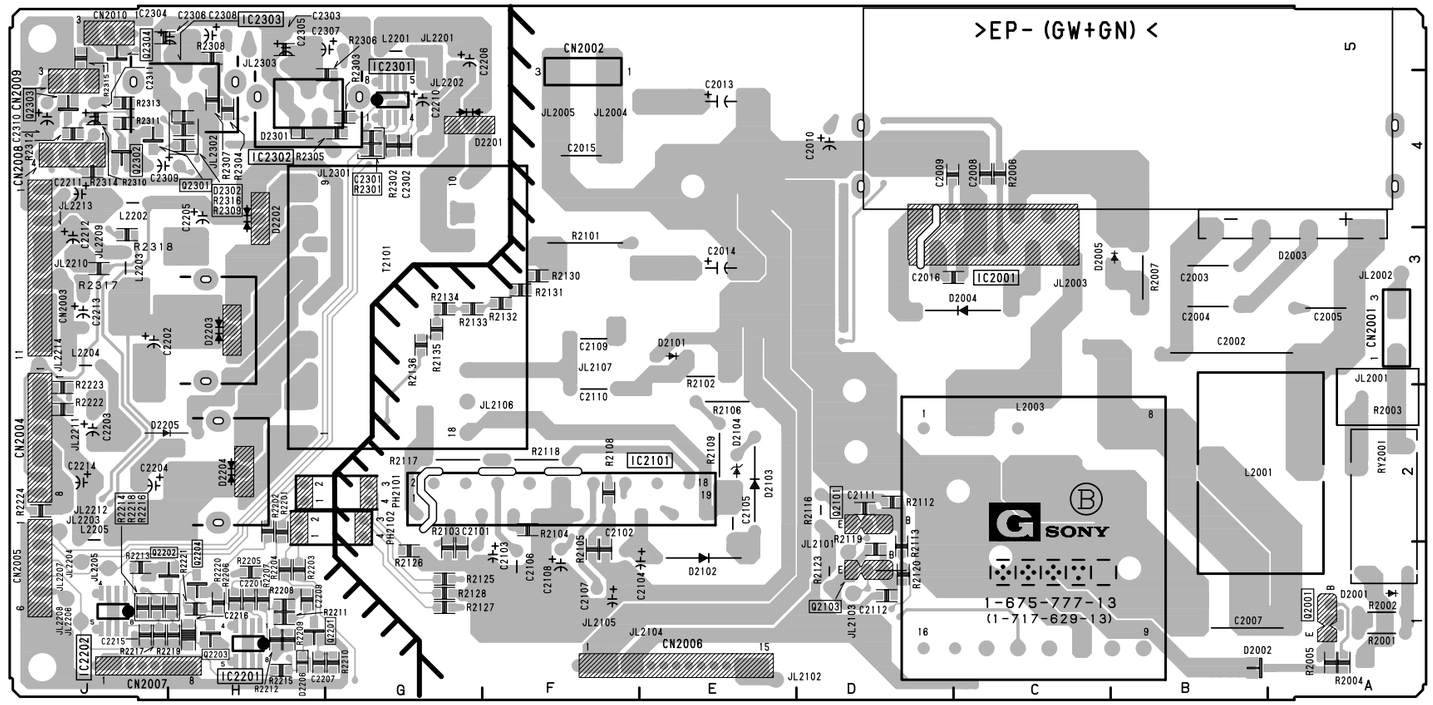
• Refer to page 8-30 for Printed Wiring Board





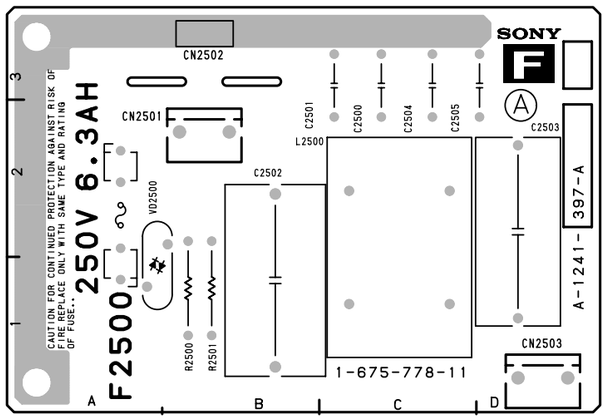
F – B SIDE –

SUFFIX ; -11



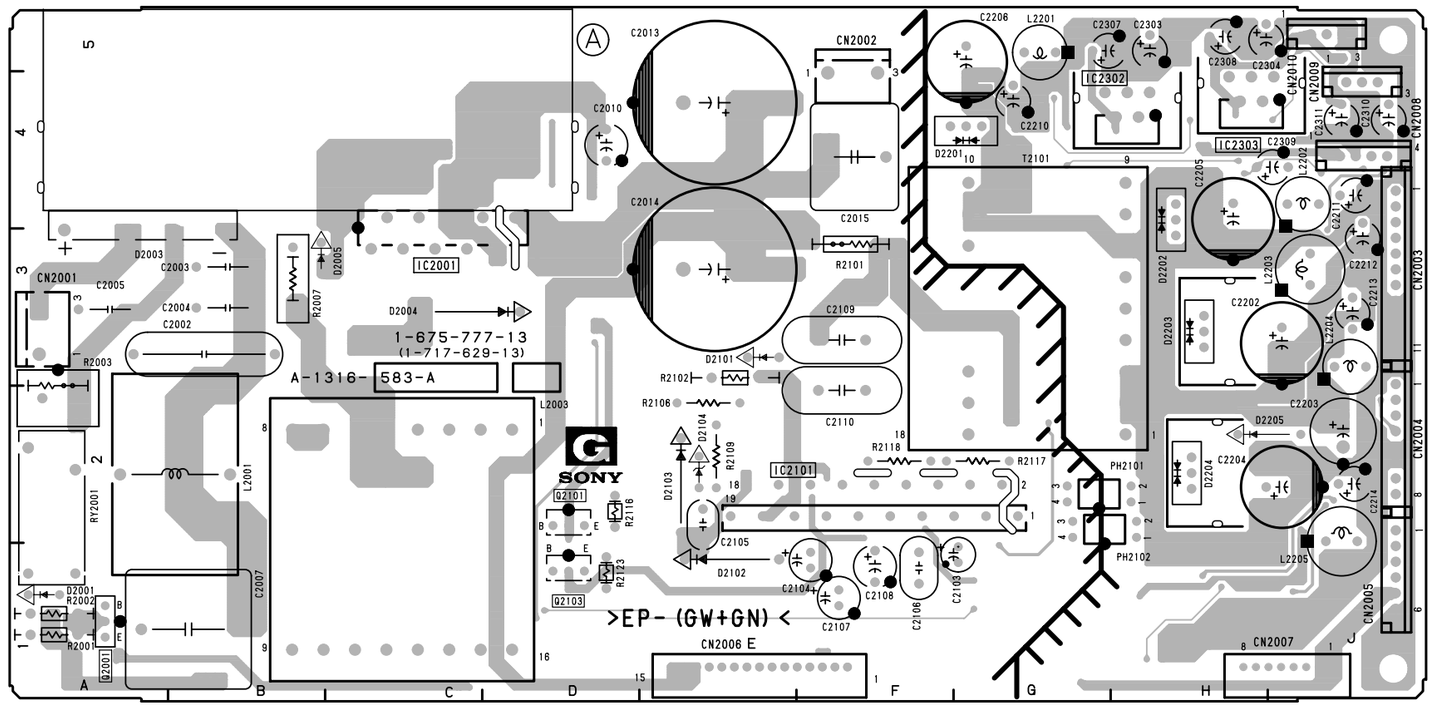
G – B SIDE –

SUFFIX ; -13



F – A SIDE –

SUFFIX ; -11



G – A SIDE –

SUFFIX ; -13

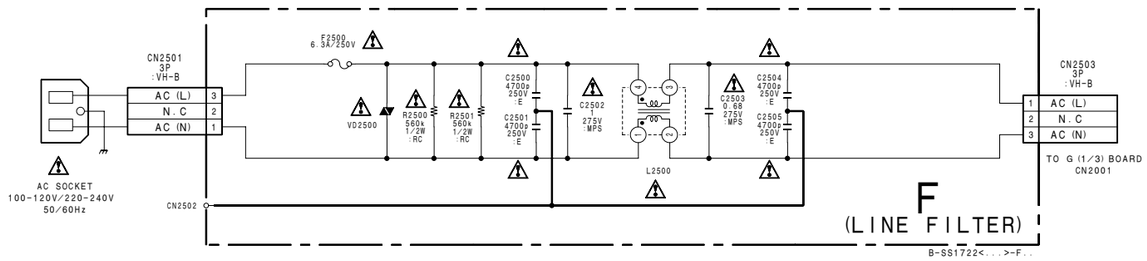
- Refer to page 8-32 for Printed Wiring Board
- Refer to page 8-35 for IC Block Diagrams

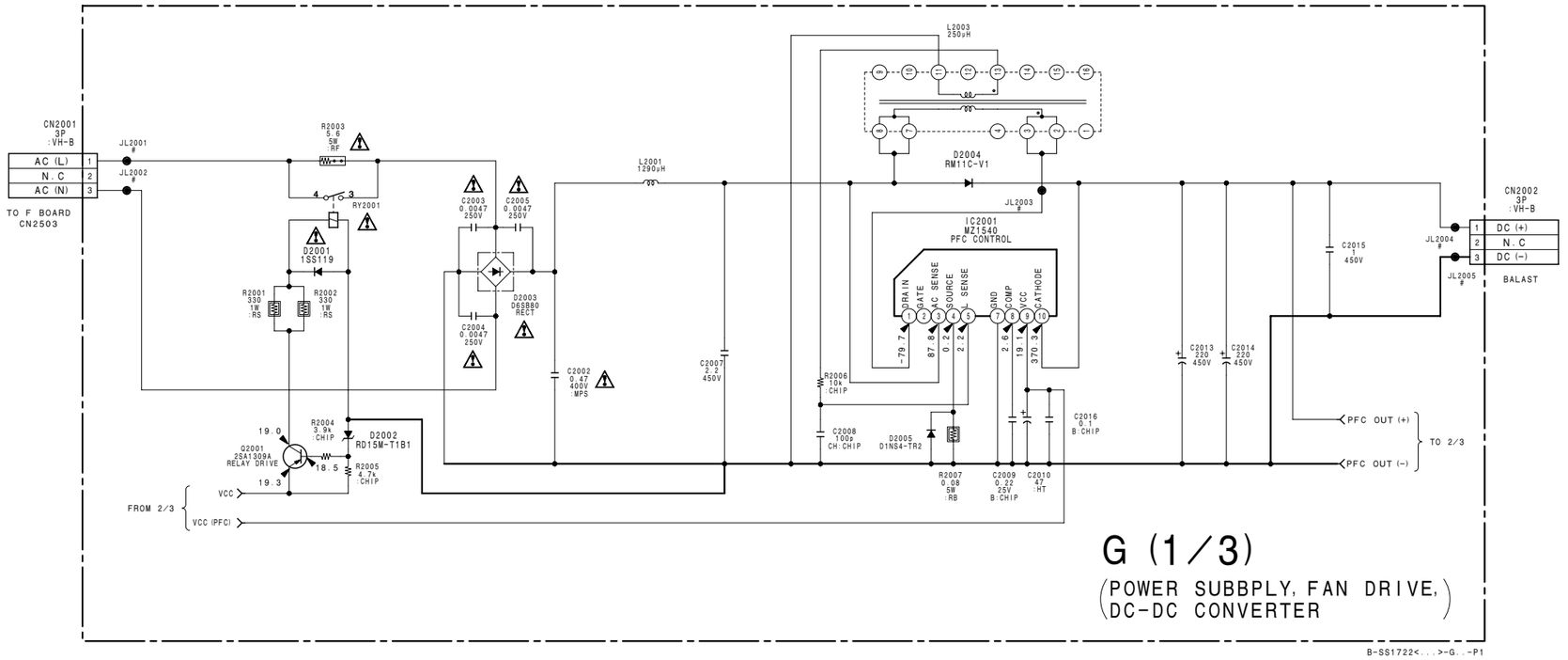
G

1-675-777-13

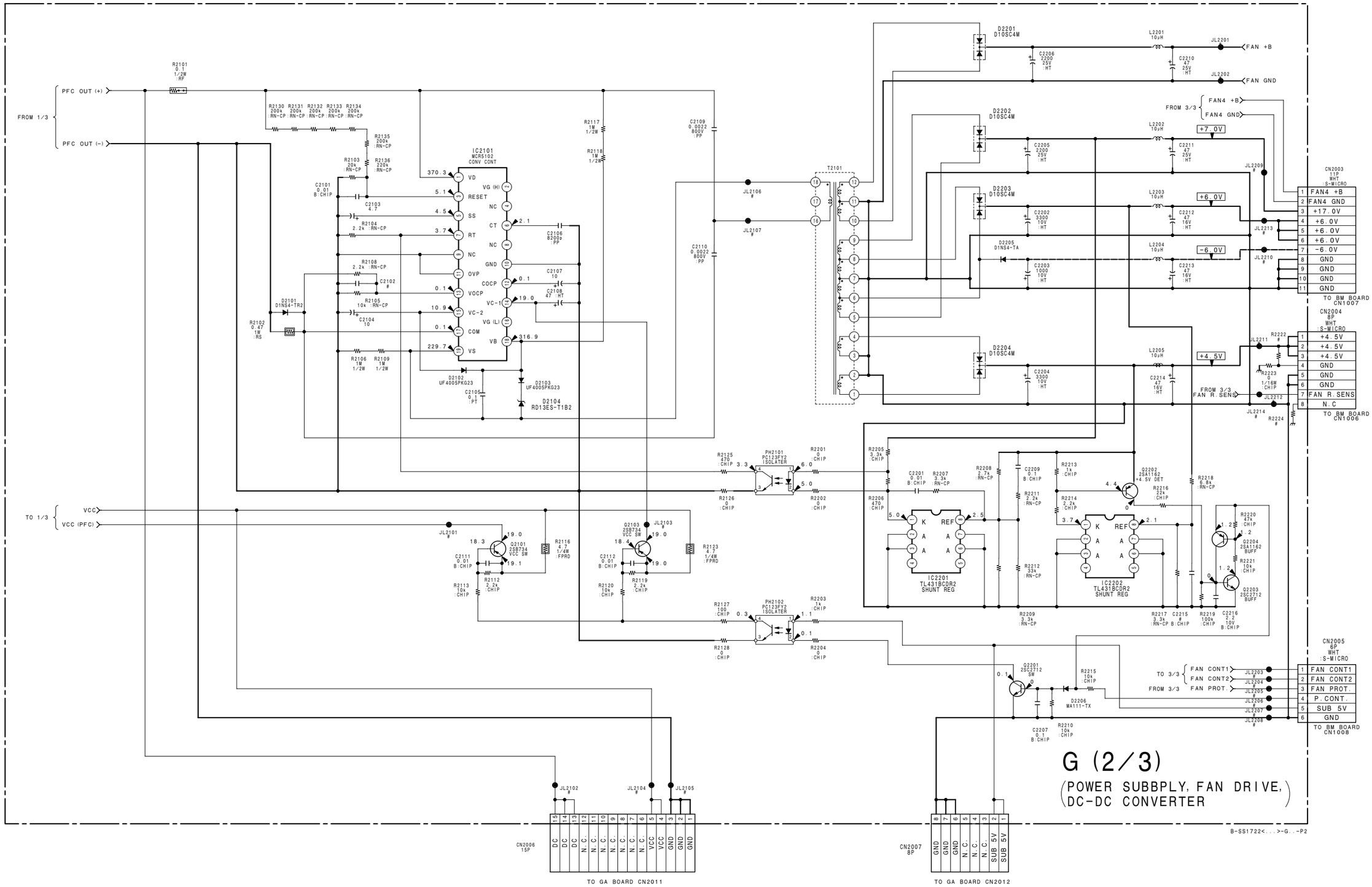
D2001	*A-1
D2002	*A-1
D2003	A-3
D2003	*A-3
D2004	C-3
D2004	*C-3
D2005	B-3
D2005	*C-3
D2101	E-3
D2101	*E-3
D2102	E-1
D2102	*E-2
D2103	E-2
D2103	*E-2
D2104	E-2
D2104	*E-2
D2201	F-4
D2201	*F-4
D2202	H-3
D2202	*H-3
D2203	H-3
D2203	*H-3
D2204	H-2
D2204	*H-2
D2205	H-2
D2205	*J-2
D2301	*H-4
IC2001	C-3
IC2001	*D-3
IC2101	E-2
IC2101	*E-2
IC2201	*H-1
IC2202	*J-1
IC2301	*G-4
IC2302	G-5
IC2302	*H-4
IC2303	H-4
IC2303	*H-5
Q2001	A-1
Q2001	*A-1
Q2101	D-2
Q2101	*D-2
Q2103	D-1
Q2103	*D-1
Q2201	*G-1
Q2202	*J-1
Q2203	*H-1
Q2204	*H-1
Q2301	*J-4
Q2302	*J-4
Q2303	*J-4
Q2304	*J-5

*:B Side mount

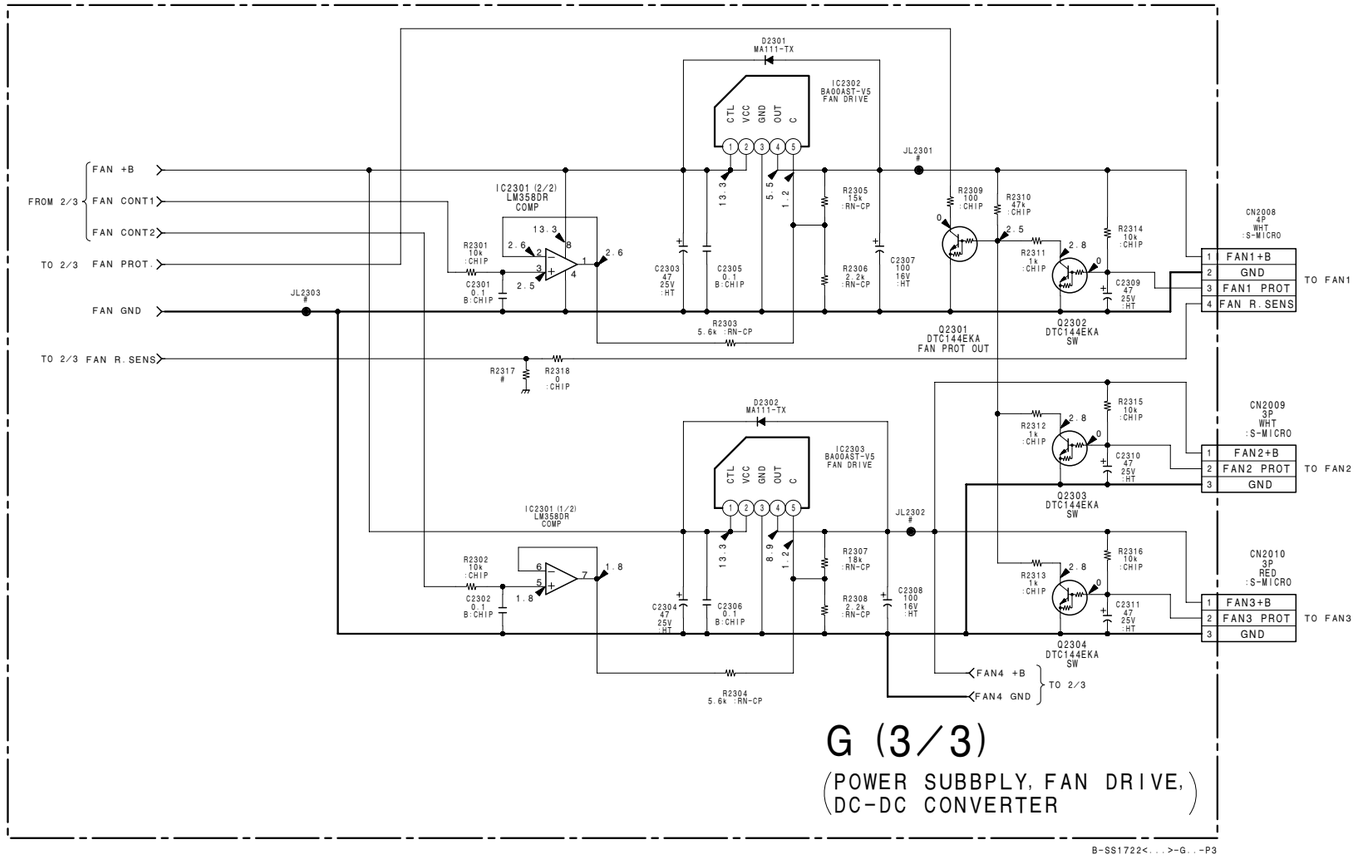




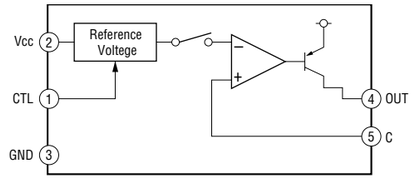
- Refer to page 8-32 for Printed Wiring Board
- Refer to page 8-33 for IC Block Diagrams



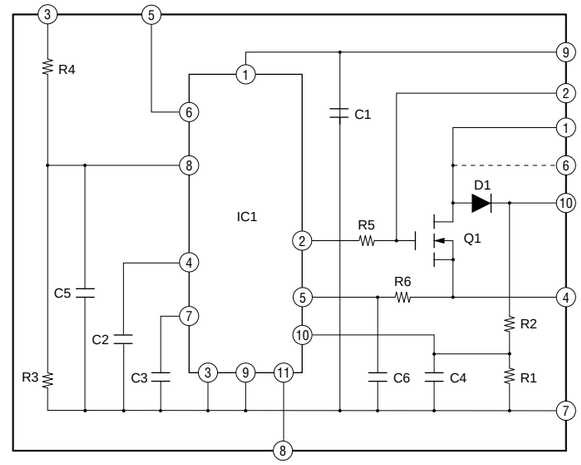
• Refer to page 8-32 for Printed Wiring Board

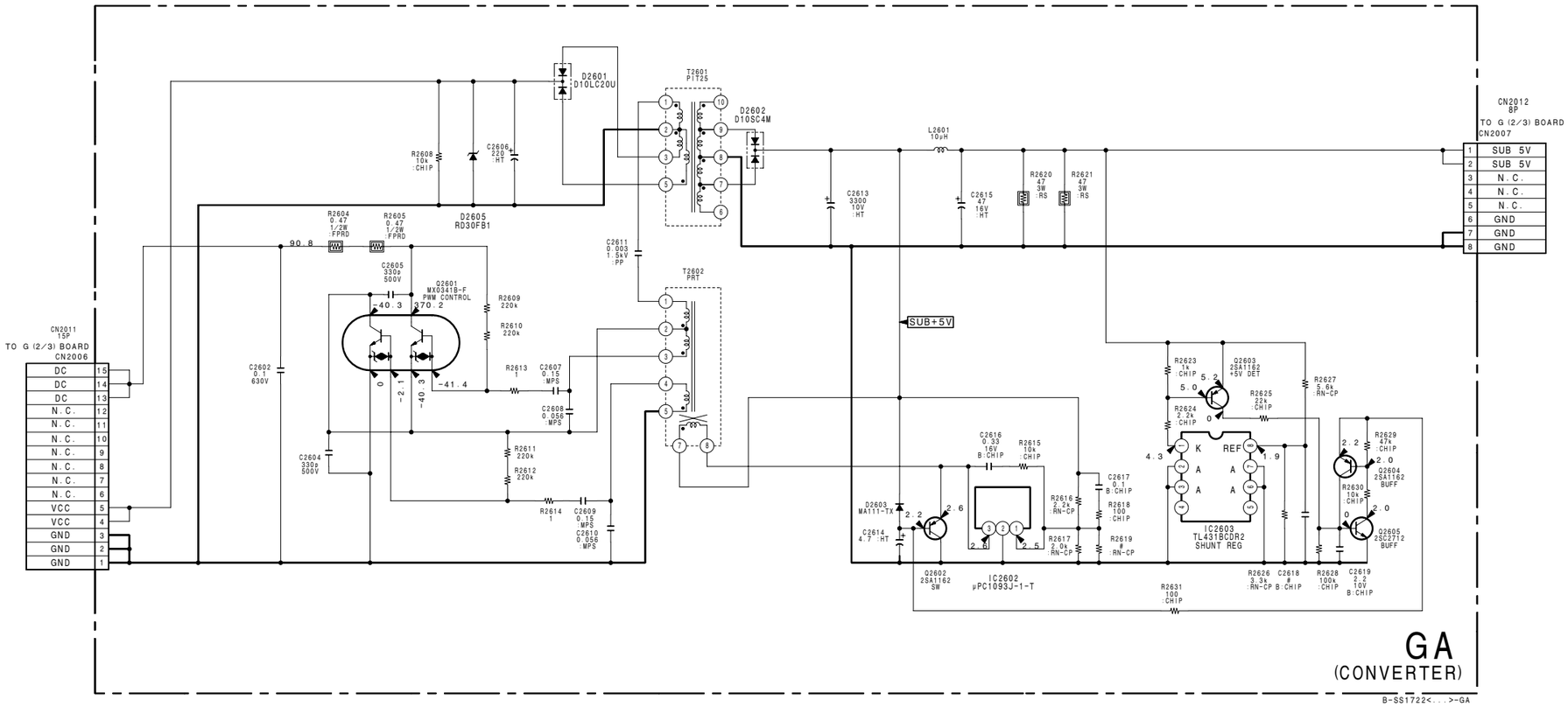


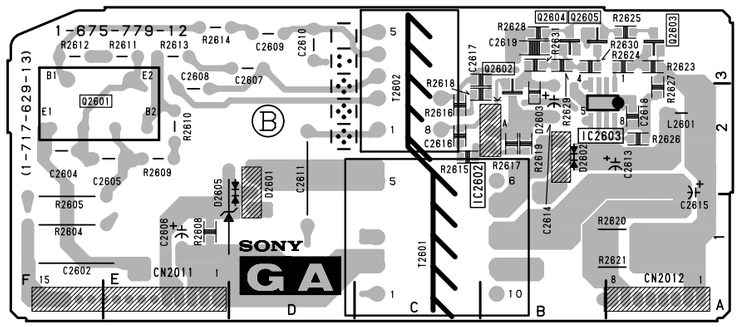
BA00AST-V5 (IC2302, IC2303)



MZ1540 (IC2001)

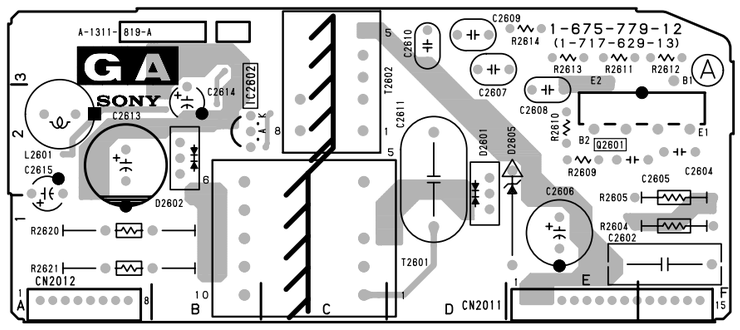






GA – B SIDE –

SUFFIX ; -12



GA – A SIDE –

SUFFIX ; -12

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer :

Check the metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA. Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

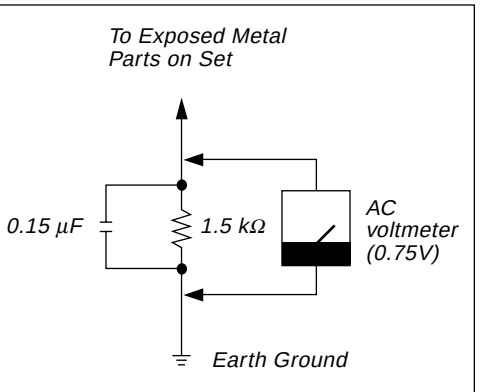


Fig A. Using an AC voltmeter to check AC leakage.

English
02GY16-1
Printed in Japan
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9-870-348-01